NEXT ANNUAL SESSIONS
American Medical Association, Kansas City, May 11–15, 1936
California Medical Association, Coronado, May 25–28, 1936

CALIFORNIA AND WESTERN MEDICINE

Owned and Published Monthly by the California Medical Association
FOUR FIFTY SUTTER, ROOM 2004, SAN FRANCISCO
ACCREDITED REPRESENTATIVE OF THE CALIFORNIA AND NEVADA MEDICAL ASSOCIATIONS

VOLUME 44
NUMBER 5

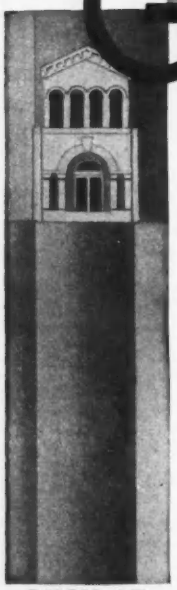
MAY · 1936

50 CENTS A COPY
$5.00 A YEAR

CONTENTS AND SUBJECT INDEX

"Entered as second-class matter at the post office at San Francisco, under the Act of March 3, 1879." Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 10, 1918.

GREENS' EYE HOSPITAL



BUSH AT
OCTAVIA
STREET

San Francisco

Telephone
WEst 4300

•

Address
Communications
to
the
Superintendent

. . . for Consultation, Diagnosis, and Treatment of the Eye

THE HOSPITAL MAINTAINS

An outpatient eye department which functions daily from 9 a. m. to 6 p. m. A report of findings and recommendations for treatment is returned with patients who are referred for consultation.

An ear, nose and throat department conducted on the same basis as the eye department.

Emergency Eye Service

A twenty-four hour emergency eye service, including Sundays and holidays.

Staff

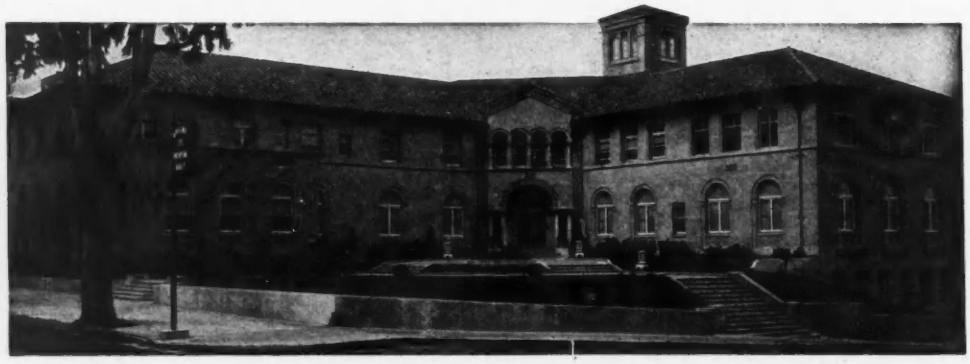
OPHTHALMOLOGY

Aaron S. Green, M. D.
Louis D. Green, M. D.
Martin I. Green, M. D.
Einar V. Blak, M. D.
Vincent V. Suglian, M. D.
David Kadesky, M. D.
Ernest Hessing, M. D.

OTOLARYNGOLOGY

Ernst Wolfes, M. D.

Medical Director: William R. Jepson, M. D.



CALIFORNIA AND WESTERN MEDICINE

OFFICIAL JOURNAL OF THE CALIFORNIA AND NEVADA MEDICAL ASSOCIATIONS

VOL. 44 MAY, 1936 NO. 5

California and Western Medicine

Owned and Published by the
CALIFORNIA MEDICAL ASSOCIATION
Four Fifty Sutter, Room 2004, San Francisco, Phone DOuglas 0062

Address editorial communications to Dr. George H. Kress as per address above; advertising and business communications to Secretary-Treasurer, Dr. Frederick C. Warnshuis, also at above address.

EDITOR . . . . . GEORGE H. KRESS

Advertisements.—The Journal is published on the seventh of the month. Advertising copy must be received not later than the fifteenth of the month preceding issue. Advertising rates will be sent on request.

BUSINESS MANAGER . FREDERICK C. WARNSHUIS

Advertising Representative for Northern California
L. J. FLYNN, 544 Market Street, San Francisco (DOuglas 0577)

Subscription prices, $5 ($6 for foreign countries); single copies, 50 cents.

Volumes begin with the first of January and the first of July. Subscriptions may commence at any time.

Change of Address.—Request for change of address should give both the old and the new address. No change in any address on the mailing list will be made until such change is requested by county secretaries or by the member concerned.

Responsibility for Statements and Conclusions in Original Articles.—Authors are responsible for all statements, conclusions and methods of presenting their subjects. These may or may not be in harmony with the views of the editorial staff. It is aimed to permit authors to have as wide latitude as the general policy of the journal and the demands on its space may permit. The right to reduce or reject any article is always reserved.

Contributions—Exclusive Publication.—Articles are accepted for publication on condition that they are contributed solely to this journal.

Contributions—Length of Articles: Extra Costs.—Original articles should not exceed three and one-half pages in length. Authors who wish articles of greater length printed must pay extra costs involved. Illustrations in excess of amount allowed by the Council are also extra.

Leaflet Regarding Rules of Publication.—CALIFORNIA AND WESTERN MEDICINE has prepared a leaflet explaining its rules regarding publication. This leaflet gives suggestions on the preparation of manuscripts and of illustrations. It is suggested that contributors to this Journal write to its office requesting a copy of this leaflet.

DEPARTMENT INDEX

(Itemized Index of Articles is printed on Front Cover)

EDITORIALS†

CORONADO ANNUAL SESSION: PRE-CONVENTION BULLETIN CONTAINS REPORTS OF OFFICERS AND COMMITTEES

Complete Annual Session Program Was Printed in the April Issue.—As readers of CALIFORNIA AND WESTERN MEDICINE will recall, there was printed in the April issue (pages 301 to 329 inclusive) the complete program of the sixty-fifth annual session, to be held at Hotel Del Coronado in San Diego, commencing on Monday, May 25, and continuing through Thursday, May 28; and a careful perusal of it for the many scientific and other Association activities should lead every member of the California Medical Association, who possibly can arrange his work, to make an effort to attend the interesting and important meetings scheduled for each day throughout the session. If, however, through inadvertence or other cause, members may not have noted the program in last month's issue, they are even now urged to refer to it. To read at least the synopses of the papers in which one has a special interest, will prove well worth the time, and especially so for the physician prevented from actual attendance.

* * *

"Pre-Convention Bulletin," with Reports of Officers and All Committees, Is Printed in This Issue.—In this month's issue, on page 407, is printed the "Pre-Convention Bulletin," which appears only in CALIFORNIA AND WESTERN MEDICINE; wherefore, members of the House of Delegates, in particular, should take along to Coronado for reference purposes, this May number. The "Pre-Convention Bulletin" contains the reports of the general officers, the councilors, the standing committees and the special committees; and these reports summarize the activities of the Association for the last twelve months. They not only discuss old but new problems, and outline also information concerning the fiscal affairs, the detailed sheets of which are always open to inspection at the central office of the Association in San Francisco.

† Editorials on subjects of scientific and clinical interest, contributed by members of the California Medical Association, are printed in the Editorial Comment column, which follows.

On Criticisms Made from Time to Time, on How the Association's Business Is Conducted.—From time to time, one hears the criticism so often made not only in our own but in many other organizations, that only the members who hold office seem to know what is going on. In reply, it can be pointed out that, if such be the case, then it may be due to the fact that those members who are elected to office make it their special business to read the minutes and reports of committees, so that they may more fully be able to understand, and so better solve the problems facing the Association. None would more truly welcome the wholehearted interest and coöperation of all members in the work of the State Association than its officers who are constantly alert in trying to acquaint themselves with the opinions of their fellow members who have elected them to the positions they hold.

* * *

Council Business Is Not "Slated."—Let no member, then, of the California Medical Association think for a moment that, because the minutes chronicle only brief statements on each item, the business matters which have a place on a Council docket are slated beforehand for this, that or the other action, or that decisions are arrived at without discussion, or that, at times, radical differences of opinion are not given expression. If the votes as recorded so often state that no opposing ballots were cast, that means only that in the discussions which took place between the councilors, whatever differences of opinion may have existed were ironed out, and that when the vote was called for, all had come to a unanimous opinion on the course of action to be approved. This is, after all, what one would expect from colleagues of long experience in organization work having broad, personal knowledge of the Association's problems and needs.

* * *

Criticisms and Suggestions Are in Order and Are Welcomed.—As has been stated by officers and councilors at the visitation conferences with component county societies, points of view and criticisms on policies and the proceedings are, and at all times, most cordially invited. In the last analysis, the California Medical Association stands as an exponent of scientific medicine, for the good reason that scientific medicine promotes the health, and thus, indirectly, the material and other welfare of the citizens of California; and as such an exponent and sponsor—as in all other professional and vocational guilds and groups—its members have learned that through organization and united effort, the individual and collective aspirations of the members of the medical profession are far more apt to be realized.

* * *

The Organized, Scientific Medical Profession Is Responsible in Large Part for Low Morbidity and Mortality Rates: Thus Promoting the Material Prosperity of the Nation.—And let it not be forgotten, no matter who may say and what to the contrary, that if, in the United States, there were not in existence a strong national medical organization with equally efficient constituent state associations, and up and doing component county medical societies, the standards of practice of the healing art, in so far as they relate to non-sectarian physicians and surgeons, would long before now, in more ways than one, have fallen to a low level.

For, believe it or not, the public health standards of the United States, with their lower morbidity and mortality rates, as compared with those of European countries (in spite of the presumable benefits of compulsory health insurance in these lands) are, and have been due in no small part to the influence and work—professional and, at times, altruistic-professional—which the members of the medical profession, in every part of the Union, and down to its almost smallest part, have generously given to the betterment of the physical, and so, indirectly, to the material and other welfare of lay fellow citizens. Ours is a noble guild, in which every member, legally accredited, may find opportunities without end to be of real and ofttimes vital service to those who come to him in hours of need.

* * *

In Union There Is Strength.—May we not, then, one and all remember that if we can be of service individually, we can also, each of us, be of greater service if we act collectively. Wherefore the need of such organizations as the California Medical Association and its component county medical societies, and why every physician who honors his calling should give whole-hearted support to organized medicine.

APPELLATE COURT DECISION IN KERN COUNTY HOSPITAL CASE LAYS FOUNDATION FOR A PROPOSED INITIATIVE LAW TO OPEN COUNTY HOSPITALS

Full Opinion of Appellate Court Was Printed in March Issue.—When, on page 189 of the March issue, this journal printed in full the opinion of the Appellate Court of the Fourth California District, editorial comment upon the decision was made on page 146, and later, on page 253 of the April number. The California Supreme Court decided against the appeal from the Appellate Court's decision, thus emphasizing the force of the provisions of the state constitution which govern the expenditure of public moneys.

As was stated in the comments above referred to, some of the language used in the Appellate Court decision, in so far as it referred to conditions under which certain classes of non-indigent patients could be admitted to county hospitals, might, in the opinion of many physicians, have been clarified still more. On the whole, however, the court's opinion was in line with the points of view held by most licensed practitioners of medicine and surgery practicing in California; although it certainly was far from acceptable to the Board of Supervisors of Kern County and of the other counties who supported them through *amici curiae*, in the appeal that was taken to the Supreme Court.

Kern County Supervisors and Their Supporters Propose a Constitutional Amendment: To Open County Hospitals to Both Indigent and Non-Indigent Citizens.—Witness in this connection, the following excerpts from *The Bakersfield Californian* of April 4, 1936:

PETITIONS DEMAND VOTE ON KERN AND STATE HOSPITAL ISSUE

Hospitalization on Pay Basis Is Urged By Group

Petitions asking that a proposed change in the Constitution of California, which would allow county hospitals to accept non-indigent patients, be submitted to the voters are being circulated throughout California by members of various civic, labor and farm organizations, it was learned today. The petitions have their origin in Kern County, where the Kern General Hospital Protective League has led the state-wide fight for public hospitalization in county hospitals.

MANY IN FAVOR

Thousands of signatures already have been affixed to the petitions, attesting the favor with which the proposed initiative measure is viewed by the electors, according to proponents of the move.

The Attorney-General has summarized the proposed measure as follows:

Establishment and maintenance of hospitals for pay patients by political subdivision. Initiative constitutional amendment. Authorizes the governing body of any city, county, or city and county, to establish and maintain a hospital for the care and treatment of any resident thereof whether an indigent or non-indigent, and to enact rules prescribing the rates to be charged each resident, other than indigents, for hospital services and supplies.

THEME OF PETITIONS

The petitions are addressed to the Secretary of State of the State of California, and read:

We, the undersigned, registered qualified electors of the State of California, residents of Kern County, present to the Secretary of State this petition and hereby propose an amendment to the Constitution of the State of California by adding Section 21 to Article XI thereof, to read as hereinafter set forth in full, and petition that the same be submitted to the electors of the State of California for their adoption or rejection at the next succeeding general election or as provided by law.

The petitions then continue and set forth in technical terms the proposed section as interpreted above by the Attorney-General.

* * *

The Proposed Law Would Be an Amendment to the Constitution of the State of California.—If the proposed constitutional amendment, title printed above, is to have a place on the November, 1936, ballot, a total of 186,000 validated names of voters must be attached to its initial petition, and these are required to be in the hands of the Secretary of State at least 110 days before the November, 1936, election. Under existing economic conditions and with the present temper of many voters, it is quite possible that the number of signatures needed may be secured. If so, the members of the medical profession will have before them, in the months up to the November election, a real and serious task. Of that, however, more later on, in case the initiative petition actually finds a place on the November ballot.

* * *

Component County Societies and Legislative Candidates.—In the meantime, it is to be hoped that component county societies will be fully alert to their responsibilities prior to, and in the near-at-hand primary elections, and that members throughout the State will give consideration and support only to those legislative candidates, for either Senate or Assembly, who are known to have sound opinions on public health matters. Physicians are citizens and taxpayers. They owe it to themselves, in virtue of their special qualifications and calling, to inform their lay fellows, in proper, diplomatic fashion, concerning the importance of electing only those senatorial and assembly candidates whose past records indicate that they will support sane and legitimate public health measures. This is our immediate duty. And it should be remembered that in California, even though the large cities have a preponderance of power in the lower house or Assembly, the smaller and rural counties are in position to exercise as great or even greater legislative influence, because of their larger proportion of state senators.

* * *

Component County Societies Have an Immediate Duty Facing Them.—The members of every component county society, and the officers especially, thus have in all this matter a serious and important obligation. Now is the time, therefore, to delegate to standing or special committees the work of contacting legislative candidates so that the information so gained may be given, not only to fellow physicians, but to patients and to those other citizens who likewise have the welfare of the State and its many economic, social welfare and public health activities truly at heart.

MEDICAL HISTORY THAT IS NOT HISTORY: COMMENT ON A LAY JOURNAL'S MISSTATEMENT OF CALIFORNIA MEDICAL ASSOCIATION ACTIVITIES

April 20 Issue of "Time" Discourses, Not Learnedly but Otherwise, on Medicine.—The weekly magazine *Time,* in the "Medicine" department of its issue for April 20, 1936, has as an opening article, "Pre-Convention [A. M. A.] Problems," in which the California Medical Association and the names of several of its members are mentioned. Every sentence of the third and fourth paragraphs may be pronounced a glaring misstatement of fact—whether made through ignorance, or by intention, we do not know.

* * *

The First and Second Paragraphs.—The opening paragraph is as follows:

The American Medical Association will meet in Kansas City next month. Some seven thousand United States doctors will attend that annual convention. But only 172 members, delegates for the 101,754 American Medical Association members, will have anything authoritative to say, and that only between the authoritative gavel bangings of the Speaker of the House of Delegates, 70-year-old Dr. Nathan Bristol Van Etten of the Bronx.

The second paragraph, referring to the annual reports in a recent issue of the *Journal of the American Medical Association,* quotes some of Secretary Olin West's reports on certain American Medical Association work.

The Misstatements of the Third and Fourth Paragraphs.—The declarations made in the third and fourth paragraphs are so widely and so surprisingly at variance with actual facts that they are considered below, sentence by sentence, our comments following:

* * *

Long-time predecessor of Dr. Van Etten as Speaker of the American Medical Association House of Delegates was Dr. Frederick Cook Warnshuis. Disaffection among American Medical Association delegates and officers plus his own ill health cost Doctor Warnshuis his job. When he took the secretaryship of the California Medical Association, American Medical Association headquarters in Chicago expected him to control that State's alarming tendency toward socialized medicine.

To every member and fellow of the American Medical Association who is at all familiar with the national organization, and its constituent state medical associations, this statement that American Medical Association headquarters in Chicago "expected Doctor Warnshuis to control the California Medical Association's alarming tendency toward socialized medicine," sounds for what it is, namely, a gross absurdity. The officers of the American Medical Association at Chicago and elsewhere would not be holding their positions in the American Medical Association, if they believed that it was possible for any one man to control a state medical association's policies, particularly, as in this instance, California, with its 5,397 members, making it the fourth largest state medical society in the United States. The secretary of the California Medical Association, Doctor Warnshuis, certainly holds no such silly notion, nor do the members of the Council who elected him; and our personal acquaintance with most of the officers of the American Medical Association at Chicago, extending over many years, permits us to affirm that those colleagues likewise hold no such ridiculous thought.

* * *

But Doctor Warnshuis was unable to prevail against Dr. Walter Bernard Coffey, pugnacious chief surgeon of the Southern Pacific Railroad, who bosses the politicians who control the practice of medicine in California.

We cannot conceive from what source the medical editor of *Time* picked up the preposterous idea quoted above. In the first place, the practice of medicine in California is governed by the State's Medical Practice Act. Each of the members of the California Medical Association avails himself of his right to practice medicine, as in his own judgment seems best, in conformity with the state's legal enactments. Secondly, Dr. Walter B. Coffey of San Francisco is not at the present time, nor for almost ten years has he been, an officer of the California Medical Association. It may be added that throughout the State, there are a rather large number of California Medical Association members, who in recent years have taken a greater and much more active part than his, in the consideration and determination of the present policies of the California Medical Association; which policies, by the way, are laid down, not by him or any other man, but by the House of Delegates (one delegate for every fifty members in a component county society of the California Medical Association), and by its Council of nine district councilors (three elected each year, for three-year terms), and six councilors-at-large (two elected each year for three-year terms), and seven general officers (elected each year). Most of the delegates and practically every one of these councilors have had years of organization experience behind them.

What an irrational statement, then, even to suggest that Doctor Coffey directly or indirectly controls, through the delegates and councilors, or through any other persons, the practice of medicine in California! If the proprieties of the printed word permitted, it might be possible to give expression to one's opinion of such unreasonable prattle, and of the person who would have the temerity so to chatter.

* * *

Results: The California Medical Association last year practically bolted from the American Medical Association.

The California Medical Association was represented at last year's session in Atlantic City by seven delegates, to whom, individually and collectively, such a conception as given above never occurred. The California Medical Association delegates were interested and active participants in the proceedings of the House of Delegates up to the very moment of its adjournment. To talk, therefore, about California as "practically bolting," is ludicrous, and then some.

* * *

The American Medical Association refused to elect a California doctor as trustee.

Two trustees were elected last year, one from Oregon and one from West Virginia, so that the Association's choice could be twisted to reflect upon all the other states in the union. It is certainly the right of the American Medical Association House of Delegates to decide from what states the trustee members of the national organization shall come, and who they shall be, so that the inuendo probably intended, is decidedly out of place.

* * *

Eleven thousand California doctors have virtually no say concerning the practice of their profession.

"Inaccurate and incongruous" must be the verdict of California physicians on reading such palpable nonsense. The Board of Medical Examiners of the State of California carries on its roster the names of 10,490 licensed physicians, of whom 5,397 are members of the California Medical Association. Of the nonmembers, several thousand are elderly physicians who have come to California to spend their remaining years, and who are so little in active practice that they may be said to be virtually on the retired list. California membership studies made in recent years reveal the fact that only about 1,200 of the nonmembers would be eligible for admission to the Association, and that with many of these, financial and other good reasons account for their nonaffiliation. However, both members and nonmembers of the California Medical Association have very much to say about the practice of their profession, and they carry on their work, both individually and

collectively, as they see fit, without let or hindrance, except as they violate the provisions of the medical practice act of the State, or commit gross breaches of ethical conduct; in which latter instance they lay themselves liable to citation before the constituted authorities of their fellows, to explain why they choose to jeopardize the scientific and ethical standards of their guild, and its capacity to adequately serve the people.

* * *

During the past year these changes affecting the California carbuncle on the body of the American Medical Association have occurred: The American Medical Association has become more lenient toward California experiments in the relation of doctor to patient; California doctors were scared away from drastic changes in ethics by Upton Sinclair's EPIC. Doctor Coffey hopes that by "playing ball" with the American Medical Association that organization will fulfill his dearest wish and agree that he has cured many a case of cancer with hypodermic injections of extracts of adrenal cortex.

"California carbuncle" must be put down as strained effort of cheap and inapt smartness, to which a number of *"Time's* editors, ablest historians of our day" (if one may refer to the radio laudations of their merits), seem obsessively addicted.

We believe that the California Medical Association, one of the largest and best organized constituent state associations of the American Medical Association, far from being a carbuncle on the body of the national organization, is a state unit of which the American Medical Association is and has just right to be proud.

The "leniency of the American Medical Association toward California experiments in the relation of doctor to patient" is a nonsensical statement, because the national organization is too busy with its own important work to meddle with a state unit's studies of the attitude of physicians to their patients.

When the "able historian" who conducts the "Medicine" department of *Time* has the presumption to print, "California doctors were scared away from drastic changes in ethics by Upton Sinclair's EPIC," his superficial and senseless twaddle are more obvious than ever.

Why Doctor Coffey should be dragged in by *Time*, as in the concluding sentence of the last quotation, is beyond our ken, and to every member of the California Medical Association who knows aught about its organization work, or that of the American Medical Association, the reference must sound like mere moonshine and balderdash.

* * *

Question Arises of Diagnosis of the Mental Condition of the Magazine's "Medical Editor." —Within a day or two after the issue of *Time* for April 20 reached California, several colleagues called our attention to the article quoted, on which these comments are now made. If *Time* were a publication of lesser circulation, it would be questionable whether any statement, in relation to the California Medical Association and several of its members, would be deserving of the space here given. When one remembers, however, the emphasis which radio announcers place on the so-termed accuracy of *"Time's* editors, the ablest historians of our day," then the declarations seemingly made in great earnestness by that magazine's contributor or editor on matters medical, must amuse California and other physicians—who actually know a good deal about the matters discussed—as being little less than farcical and laughable. We would observe also that, if we felt the statements made in other departments of that publication were as far from the truth as are those to which our remarks are directed, we should promptly cancel our own subscription, and quite as quickly cut off the broadcasted "March of Time" if, by chance, the radio brought it to our ears.

However, *Time's* "medical editor," when "up against it" for copy, may have been indisposed through illness—or, who knows, for some other cause—or may even have been absent from his desk, making it necessary for friend or office boy to "pinch-hit" and help him out; for any one of which or similar reasons, he might possibly be excused. Nevertheless, if in future the articles on "Medicine" in *Time* are such babblings as those excerpted, then we shall religiously avoid perusing the stuff, although presuming that the magazine hires the "medical editor" to portray the medical history of the day, and in far better form than that to which expression is given in the periodical's issue of April 20.

Other State Association and Component County Society News.—Additional news concerning the activities and work of the California Medical Association and its component county medical societies is printed in this issue, commencing on page 407.

EDITORIAL COMMENT†

ARTIFICIAL FEVER AS A THERAPEUTIC PROCEDURE

The use of artificially produced fever has become an established therapeutic procedure for the treatment of certain diseases. There is a constantly growing list of conditions for which pyrotherapy has proved beneficial. It is of particular value in the treatment of syphilis of the central nervous system, especially paresis, tabo paresis, and tabes dorsalis. In other forms of neurosyphilis which fail to respond to drug therapy, artificial fever is a valuable adjunct. Fever therapy is indicated in gonorrheal arthritis, epididymitis, and resistant urethral and prostatic infections. The effects upon gonorrheal arthritis are striking, the pain and swelling responding promptly. In other types of arthritis, in multiple sclerosis and leprosy, irregular results have been noted with

† This department of CALIFORNIA AND WESTERN MEDICINE presents editorial comment by contributing members on items of medical progress, science and practice, and on topics from recent medical books or journals. An invitation is extended to all members of the California and Nevada Medical Associations to submit brief editorial discussions suitable for publication in this department. No presentation should be over five hundred words in length.

fever therapy. The field of pyrotherapy is gradually extending, and its exact place in therapeutics should be determined by careful trial in various conditions.

Interest in artificial fever therapy was stimulated by the brilliant results obtained by Von Juaregg in 1918 in the treatment of general paresis with artificially induced malaria. Many other methods of producing an artificial fever have been introduced since that time, including inoculation with the parasites of relapsing fever and rat-bite fever, injections of vaccines and foreign proteins; injections of sulphur in oil, diathermy and radiothermy; electric blankets and heat cabinets; hot baths and the blanket method. As comparable therapeutic results can be obtained with any method which produces an adequate fever, it is generally agreed that the fever is the essential factor in the procedure rather than the way in which it is produced.

The exact manner in which artificial fever exerts a favorable influence is not known. In syphilis there is a direct effect upon the Treponema pallidum. Other factors which are not wholly understood may also play a part.

Hyperpyrexia can be produced by preventing radiation of body heat through simply wrapping the patient in blankets and adding heat from an external source. The body temperature rises to the desired height of 40 degrees centigrade (104 degrees Fahrenheit) within two hours. It can be maintained in this way as long as desired. This method has been described in a recent issue of the *Journal of the American Medical Association*.[1] In the treatment of syphilis of the central nervous system, five hours of fever of 40 degrees centigrade (104 degrees Fahrenheit) is regarded as one treatment. This is repeated weekly for ten weeks, a course of fever consisting in fifty hours of temperature at 40 degrees centigrade (104 degrees Fahrenheit).

While artificial fever can be produced easily in this way, it must be fully realized that fever therapy has certain dangers. The patient selected for the treatment should be in good physical condition. Any serious physical defect is a contraindication to fever therapy, such as advanced age, debility from any cause, hypertension, cardiac disease, tuberculosis, obesity, etc. The candidate for artificial fever should be physically able to stand a major abdominal operation.

Artificial fever therapy should be given only by nurses and physicians trained in this work, and only in properly equipped hospitals. This treatment is a hospital procedure, requiring twenty-four hours' hospitalization. With careful selection of patients, and under conditions as suggested above, artificial fever, for therapeutic purposes, can be induced with safety.

450 Sutter Street.

NORMAN N. EPSTEIN,
San Francisco.

1 Epstein, N. N., and Cohen, M.: The Effects of Hyperpyrexia Produced by Radiant Heat in Early Syphilis, J. A. M. A., 104:883 (March 16), 1935.

PULMONARY TUBERCULOSIS: THE NEED OF EDUCATION FOR THE GENERAL PRACTITIONER IN ITS DIAGNOSIS AND TREATMENT

That the general practitioner needs further training in the diagnosis of pulmonary tuberculosis is very apparent to those working in a general tuberculosis hospital. We see here the incorrect diagnosis of patients referred either to the hospital wards directly or to the chest clinic. At the San Francisco Hospital on the University of California tuberculosis service during the month of October, 1935, fifteen new patients were sent in to the chest clinic diagnosed by their private physicians as having pulmonary tuberculosis. Of these patients, only five actually had pulmonary tuberculosis. In other words, ten patients (60 2/3 per cent) were incorrectly diagnosed.

Too frequently the following happens: The patient comes to us with a history of long-standing cough and sputum. After making the diagnosis of advanced pulmonary tuberculosis, comes the natural inquiry, had he never before consulted a physician? Oh, yes, he had consulted several physicians, who had diagnosed bronchitis and who had given him various prescriptions for his cough. Indeed, there are many patients who state that no examination of the chest was made at all. In some of these "bronchitis" cases, not until the patient has hemoptysis does the physician suspect tuberculosis. Even with hemoptysis as the onset of the disease, many patients, in the absence of physical signs in the chest, are told to go home and "forget it"; that the hemorrhage was due to the "rupture of a delicate vein in the throat." We sometimes see patients with a gastro-intestinal onset treated as "dyspeptics," or the fatigue and nervousness of the tuberculous patient are regarded as symptoms of neurasthenia. Vomiting after cough, a symptom emphasized as almost pathognomonic of a lung lesion to the third-year medical student, is treated as "gastritis." The underlying disease is overlooked.

Hazardous as is the failure to diagnose tuberculosis, equally hazardous is the tendency to diagnose every suspect as active tuberculosis. Almost daily we find patients with pulmonary symptoms or unexplained loss of weight, due to other diseases, branded as tuberculous. Often physicians, because of a suspicious symptom, have sent patients to warm climates or other meccas for the tuberculous; families have been broken up and patients have lost their positions unnecessarily. How often, after having spent months in sanatoria, have patients been found to be nontuberculous! But too much blame should not go to the general practitioner. Consider the large proportion of the nontuberculous patients who are admitted and kept in sanatoria, as well as the large number of patients who are "cured" after only two or three months in these institutions. This applies especially to the patients with negative or no sputum. The general practitioner can point out that the specialist himself is not infallible.

But even in the correctly diagnosed cases, results are sometimes tragic. No effort is made to

isolate the patient or to examine the contacts. Because the latter look healthy they are ignored; disastrous consequences result from failure to trace the source of the infection. A coughing grandmother may be responsible, but because of the widespread impression that old people have an immunity to tuberculosis, the source is overlooked. Even if the diagnosed patient is isolated, the danger to the other members of the family still exists. The responsibility of examining the entire household rests with the attending physician. We have often found that innumerable patients have been diagnosed as tuberculous for years, but that the physicians had neglected to report them to the local department of public health, and that the contacts had never been examined.

Space prevents further discussion of mistakes in treatment. Osler epitomized the importance of diagnosis and treatment in these memorable words: "The ordinary physician treats the patient with medicine and without rest—rest, fresh air, and proper diet, the three things which will arrest a large number of cases of pulmonary tuberculosis *if*, and the if is *you*, gentlemen, the diagnosis is made early."

San Francisco Hospital.

E. Rosencrantz,
San Francisco.

REGULATION OF THE BLOOD SUGAR

The prevailing conception of the regulation of blood sugar, as exemplified by the events taking place after a meal or a dextrose tolerance test, may be summarized as follows:

1. The absorption of carbohydrates stimulates the pancreas to an increased output of insulin.

2. The increase in insulin causes greater storage and oxidation of sugar.

3. Excessive postprandial hyperglycemia in diabetes mellitus is due to failure of the pancreas to secrete increased amounts of insulin in response to absorbed carbohydrates.

4. The "diabetic" type of curve obtained after a dextrose tolerance test in starvation is due to lack of the proper response from the pancreas, which needs frequent stimulation in order to respond normally. Conversely, repeated or prolonged administration of dextrose results in greater tolerance for sugar due to increased mobilization of insulin in response to the previously administered sugar.

In 1932 Althausen and Thoenes,[1] in studying the influence of hepatic toxins on carbohydrate metabolism, found that increasing injury to the liver caused progressive impairment in dextrose tolerance. On the other hand, hyperactivity of the liver during periods of recovery with active regeneration of hepatic parenchyma, was observed to produce greater than normal tolerance to dextrose. These experiments showed that in the presence of an intact pancreas the liver is the organ which determines the shape of the dextrose tolerance curve.

These findings were confirmed and extended by a group of Chicago workers under the leadership of Soskin, who showed that the pancreas is not essential to the metabolic reactions which determine the normal dextrose tolerance curve. Soskin et al.[2,3,4] obtained normal dextrose tolerance curves (including adjustment to prolonged administrations of dextrose) in pancreatectomized dogs, in which a constant injection of insulin was substituted for the pancreas. In this way, the animals received an adequate supply of insulin to maintain a constant blood sugar, but were unable to mobilize additional insulin when sugar was given. If increased secretion of insulin were essential for a normal dextrose tolerance curve, these animals should have had abnormal curves, which was not the case. In another set of experiments, the same workers found normal dextrose tolerance curves in depancreatized and hypophysectomized dogs which had received no insulin for weeks.

These researches led Soskin to a new theory of blood-sugar regulation, in which the emphasis is shifted from the pancreas to the liver. According to this theory, the liver, in response to administered dextrose, decreases its output of sugar into the blood. However, the liver can respond properly to administration of sugar only under the influence of a suitable endocrine balance which, for simplicity, may be considered to consist of the opposing influences of the hormones of the pancreas and of the hypophysis. When this endocrine balance is disturbed by insufficiency of insulin or excessive activity of the hypophysis, the liver is not stimulated to inhibit its release of sugar until the blood sugar may greatly exceed the normal level, and the clinical picture of diabetes mellitus is produced. One might add that the reverse is also true, namely, when the endocrine balance is disturbed by excess of insulin or insufficient activity of the hypophysis, the clinical picture of "hyperinsulinism" is the result.

In conclusion, it must be said that the experiments just discussed do not disprove an increase in the secretion of insulin under the stimulus of a rise in blood sugar, for which there is evidence from experiments with transplanted pancreatic tissue. Also, the new conception of the regulation of blood sugar has as yet no practical application in the treatment of diabetes mellitus, but it does furnish an adequate explanation for the failure of partial pancreatectomy to cure some cases of so-called "hyperinsulinism," in which no tumor of the pancreas is present.

University of California Hospital.

T. L. Althausen,
San Francisco.

1 Althausen, T. L., and Thoenes, E.: Influence on Carbohydrate Metabolism of Experimentally Induced Hepatic Changes. I. Fasting and Administration of Thyroxin, Arch. Int. Med., 50:46, 1932. II. Phosphorus Poisoning, Ibid., 50:58. III. Chloroform Poisoning, Ibid., 50:257.

2 Soskin, S., and Mirsky, I. A.: The Influence of Progressive Toxemic Liver Damage Upon the Dextrose Tolerance Curve, Am. J. Physiol., 112:649, 1935.

3 Soskin, S., Allweiss, M. D., and Cohn, D. J.: Influence of the Pancreas and the Liver Upon the Dextrose Tolerance Curve, Am. J. Physiol., 109:155, 1934.

4 Soskin, S., and Allweiss, M. D.: The Hypoglycemic Phase of the Dextrose Tolerance Curve, Am. J. Physiol., 110:4, 1934.

ORIGINAL ARTICLES

OPERATIVE RESULTS IN CATARACTS COINCIDENT WITH DINITROPHENOL THERAPY

By HANS BARKAN, M.D.
W. E. BORLEY, M.D.
MAX FINE, M.D.
AND
JEROME BETTMAN, M.D.
San Francisco

DISCUSSION *by M. N. Beigelman, M. D., Los Angeles; M. L. Tainter, M. D., San Francisco; W. D. Horner, M. D., San Francisco.*

IN May, 1935, our attention was first drawn to the coincidence between the ingestion of dinitrophenol and the formation of cataracts. One of us had been told by Doctor Nutting of Oakland that he had seen a case he believed to have displayed such a coincidence. About a week later there appeared in the office an obese woman who had lost sixty pounds of weight over a period of eight months, after she had taken dinitrophenol, and who had recently lost the vision of both eyes. The following week another patient was seen with the same history and clinical findings. This patient was referred by Dr. W. D. Horner for consultation. Doctors Horner, Jones and Boardman[11] were the first in the literature to draw attention to the coincidence between the ingestion of dinitrophenol and the later formation of cataracts, with the warning that the medical profession might find cataracts to be a complication of the therapy. They advised that the administration of dinitrophenol be stopped until it was shown whether or not more cases of cataract in relation with the use of the drug developed. Meanwhile, Dr. Frank Rodin[1] has reported cases in and about the San Francisco Bay region to the number of thirty-six. Since this report we have seen two more such afflicted, and undoubtedly other cases have been noted by other physicians, so that the total number is still rising. This paper describes the clinical appearance of some of these patients and the results of operations on twenty eyes operated upon for cataracts in this group.

There are several common factors in all these operative cases. The patients are all women; they have all been obese; they have taken dinitrophenol; they have all lost weight; they are all of an age, but for one case in which development of cataract as a senile phenomenon, so-called, does not take place; they all saw well before the ingestion of dinitrophenol, and before their loss of weight; none of them, since operation, have shown a fundus condition which could have been responsible for cataract formation; only one had diabetes; none gave a history of early cataract formation in their immediate family; they all complained of loss of vision within six months to a year after having stopped dinitrophenol, and two of them of that loss while still taking it. The cataracts were bilateral, sometimes one more mature than its fellow, and in several cases they were equally mature; some women still saw enough with one eye to be not entirely helpless, others were brought in with only light projection and perception in either eye; while all, with one exception, had been fat but had lost considerable weight. The rapidity of cataract formation has been astonishing. One patient with a mature cataract on one eye, and still able to walk about comfortably with the other, lost her vision entirely on the unoperated eye while under hospital observation in bed following operation, and then had this second eye operated upon.

From the clinical point of view, then, these cataracts in this reported group are of a type that have not before occurred in our operative cataract material. The study of the tables is better than any lengthy description. The main points to be noted, however, are: that most of the extractions can be done by linear extraction and in most cases a round pupil can be obtained; and that we did not attempt any intracapsular extractions due to the fact that we did not know whether or not there might be complicating factors, such as vitreous degeneration, and that many of these lenses were so intumescent, and the capsule so thin, that an intracapsular extraction would have been difficult or impossible. It is further to be noted that in two cases vitreous loss occurred—in one, a marked amount of fluid vitreous, in the other a small bead only; that in many cases the chamber was extremely shallow—small hemorrhages, coming seemingly from the wound without rupture of the same occurred in several cases; and, further, that the vision was excellent in almost all cases and no deleterious effect on the eye other than the formation of these cataracts was observed in later careful examination. The cases in the tables are partly private, and partly those operated upon on the clinic service of Stanford University Medical School. While it is a great misfortune that even a small percentage of those taking dinitrophenol have been afflicted with cataracts, it is reassuring to know that operation is fairly easy and, in cases not otherwise complicated, promises excellent vision. What the processes are that tend to such rapid cataracts in some people losing weight due to the action of ninitrophenol we do not as yet know. One of us is at present engaged in collaboration with the department of pharmacology in an attempt at solving this problem.

This investigation brings up again the problems of cataract etiology in general. A review of the literature in regard to research in cataract etiology and normal lens metabolism leaves one in great doubt as to the probable mechanism of cataract formation in cases of this kind. A great deal of work has recently been done on the investigation of the vitamin C content of the aqueous and lens. Müller and Buschke[2] have shown that in naphthaline cataracts, on injecting ascorbic acid intravenously, there was a regression of the opacities. Strauss[3] was of the opinion that in naphthaline cataracts the vitamin C disappears from the aqueous because of the increased permeability of the capsule. Bellows[4] recently has found a decrease in cevitamic acid content of blood plasma in patients with senile cataracts, as compared with

normal individuals. These cataractous subjects were also slower in responding to increased intake of vitamin C as shown by plasma determinations. Bellows concludes from these findings that the disappearance of vitamin C from the aqueous and lens in cataractous eyes precedes the lens changes, and is not secondary to them, as has been suggested. Fisher[5] has investigated the reducing substances, or auto-oxidation systems of the lens, and found that these are absent after formation of cataract. It may be that in cataracts associated with dinitrophenol there is some similar destruction of thes auto-oxidation systems. The work of Day, Langston, and Obrien,[6-10] on cataract formation in rats on vitamin G deficiency, brings up the problem of diet, and it has been thought that in this clinical group dietary insufficiency might play a part; but this seems unlikely, in view of the many cases of obesity under similar dietary restrictions without the administration of the drug. In view of the changes in the capsule, and immediately underneath the capsule, one might also think of a permeability change due to the dinitrophenol which might initiate a disturbance in the nutrition of the lens or an altered p_H toward the acid side with the resultant lens opacities. It is difficult to explain the delayed formation of these cataracts after the use of dinitrophenol; in some cases more than a year elapsing from the time the drug was stopped to the onset of symptoms. Water balance or dehydration have been blamed as a possible mechanism, but this cannot be of sufficient degree to cause lens changes such as are found in Asiatic cholera. It is true that the marked increase in hyperopia noted early in many of these cases is suggestive of decreased lens volume with resultant change in refractive index of lens; but this may be due not to a change in volume of lens as much as a change in refractive index of individual fibers. These refractive changes are interesting in that they are the opposite of those in diabetic and traumatic cataracts.

In conclusion, the table as presented shows twenty eyes operated upon; but in the last two weeks three more patients with bilateral cataracts have appeared, and four more eyes than are shown in the table have been operated, all without complications. The results shown in the table, and in the additional cases just mentioned, justify a good prognosis as regards reëstablishment of useful vision to those afflicted with cataract formation coincident with ingestion of dinitrophenol and loss of weight resulting therefrom.

Stanford University Medical School.

REFERENCES

1. Rodin, Frank: To be published.

2. Müller, H. K., Buschke, W.: Naphthaline Cataract Treated with Vitamin C, Arch. f. Augenh., 108:468 (Nov.), 1934.

3. Strauss, Walter: The Ehrlich Flourescein Experiment in Beginning Naphthalin Cataract, Arch. f. Augenh., 108:585 (Nov.), 1934.

4. Bellows, John: The Cevitamic Acid Content of the Blood and Urine of Patients with Senile Cataracts, Arch. of Ophth., 15:78 (Jan.), 1936.

5. Fisher, F. P.: Reducing Substances of the Lens, Arch. f. Augenh., 108:527 (Nov.), 1934.

6. Day, P. L., Langston, W. C., and O'Brien, C. S.: Cataract and Other Changes in Vitamin Deficiency Experimental Study in Albino Rats, A. J. Ophth., 14:1005, 1931.

7. O'Brien, C. S.: Experimental Cataract in Vitamin G Deficiency, Trans. Amer. Ophth. Soc., 30:245, 1932.

8. O'Brien, C. S.: Experimental Cataract in Vitamin G Deficiency, Arch. Ophth., 8:880, 1932.

9. Day, P. L., and Langston, W. C.: Further Experiments with Cataract Resulting from Withdrawal of Vitamin G, Jr. Nutrition, 7:97, 1934.

10. Langston, W. C., and Day, P. L.: Question of Nutritional Cataracts in Albino Rats by Use of Vitamin G, Southern Med. Jr., 27:170, 1934.

11. Horner, W. D., Jones, R. B., Boardman, W. W.: Cataracts Following Use of Dinitrophenol, J. A. M. A., 105:108 (July 13), 1935.

DISCUSSION

M. N. Beigelman, M. D. (1930 Wilshire Boulevard, Los Angeles).—Although it was hardly more than a year ago that the coincidence of lenticular changes with dinitrophenol therapy became known, the "dinitrophenol cataract" today must be considered an established clinical entity. The general incidence of this complication, the appearance of the cataract, the rapidity of its development and other peculiarities in the course of the disease have been repeatedly investigated and reported. (See the article by Dr. Frank Rodin in the April issue of California and Western Medicine.)

The contribution of Dr. H. Barkan and of his collaborators deals with a less known but very important practical phase in the problem—the surgical treatment and the final results in this type of cataract.

It is fortunate indeed that the deleterious effect of dinitrophenol is limited to the crystalline lens without any other apparent intraocular change; this assures satisfactory visual results once the opaque lens is removed. The comparatively young age of these patients accounts for the favorable postoperative course: the rarity of postoperative inflammatory reactions and the speedy absorption of cortical material. Personally, I have resorted to the same extracapsular extraction that Doctor Barkan did. The lenticular intumescence which is responsible for a tautness of the capsule, in addition to the age of the patients, seemed to contraindicate the removal of the lens in toto. About the only difficulty encountered was an occasionally shallow anterior chamber; this made the use of a narrow Graefe knife preferable to a keratome section.

Doctor Barkan's experience, based on very large and carefully analyzed operative material, will be of decided value to anyone dealing with "dinitrophenol cataracts."

*

M. L. Tainter, M. D. (Stanford University School of Medicine, San Francisco).—Since this paper primarily deals with the results of cataract operations, I do not feel qualified to comment on the technical procedures described. However, the question of the etiology of these cataracts, just like that of most other cataracts, is still an unsolved problem. The sole fact relating these to dinitrophenol is that they have occurred in a number of women who, at some previous time, have taken this drug. Yet for every woman who has taken dinitrophenol and developed a cataract there are hundreds, if not thousands, who have taken equally large amounts and have not developed them. The limitation of the cataracts to women requires an explanation, since, while the drug has been administered to both sexes, yet men are apparently immune to any such change in the lens. Moreover, this type of cataract is not confined to those who have taken this drug, for several cases with a clinical picture, indistinguishable from that herein described, have occurred recently in women who have not taken dinitrophenol or any other reducing remedy. Dr. Warren D. Horner has a paper in press at the present time describing such cases. All these facts indicate that some other factor or factors must be operating to produce the

TABLE 1.—*Summary of Operative Cases and Postoperative Results*

Name	Sex	Age	Dinitrophenol	Vision Impaired	Vision Before Operation	Examination	Operation	Complications	Vision P. O.
I. W. Right eye	F.	31	May, 1934, to October, 1934, and February, 1935, to March, 1935. Maximum dose 480 mgs.	November 1, 1935	15/30—November 26, 1935 H. M. January 7, 1936	Intumescent silvery cataract a. c. very shallow, brownish post subcapsular opacities with many flakes.	January 7, 1936. Linear extraction, round pupil, no iridectomy, small cortical remnant.	None	15/20 with +10.0 sph.
I. W. Left eye	F.	31	Same	Same	15/30—November 26, 1935 Fingers 2 ft. January 7, 1936 H. M. January 10, 1936	Same	January 10, 1936. Linear extraction, round pupil, no iridectomy.	None	15/20 with +10.0 sph.
H. E. Right eye	F.	33	October, 1934-October, 1935, gr. 1½ daily, also thyroid.	October, 1935	15/15—October 10, 1935 15/100—December 20, 1935 following ascorbic acid for three weeks.	Cloth of gold opacity, many white punctate opacities in cortex, a. c. shallow.	Linear extraction, round pupil, flake of debris in pupil.	None	15/20 with +10.0 +2.0 c ×180
H. E. Left eye	F.	33	Same	Same	1/200 October 10, 1935	Intumescent silvery cataract, a. c. shallow, ascorbic acid three weeks prior to operation.	November 20, 1935. Linear extraction, round black pupil.	None	15/15 +12.0=+1.0 c x 135°
H. L. Right eye	F.	27	March to April, 1935 Amount?	September, 1935	H. M. December 9, 1935	Opalescent, intumescent cataract with sector-like opacities in anterior cortex, yellowish post-subcapsular opacity.	December 11, 1935. Linear extraction, some of the almost fluid lens escaped with incision, remainder easily expressed. Peripheral iridectomy.	None	20/20 +13.0=+1.0 c x 180°
H. L. Left eye	F.	27	Same	Same	15/70 December 9, 1935 H. M. December 15, 1935	Web-like yellowish post-subcapsular opacity. Punctate white opacities through anterior cortex most numerous under capsule, a. c. normal depth.	December 18, 1935. Linear extraction, some of the lens escaped with incision, remainder easily expressed. Peripheral iridectomy.	None	20/20 +13.0=+1.5 c x 180°
K. P. Right eye	F.	55	April, 1934, to October, 1934. Maximum dose three capsules daily.	September 1, 1935. Reading vision failed September 21, 1935.	H. M. 1 foot	Intumescent opalescent cataract, a. c. very shallow.	October 12, 1935, performed flap incision with Bard-Parker, enlarged with scissors. As capsule was opened soft lens material gushed out, nucleus expressed with spoons. Peripheral iridectomy.	None	15/20 +10=+1.50 c x 180° add +3.0
K. P. Left eye	F.	55	April, 1934, to October, 1934. Maximum dose three capsules daily.	September 1, 1935. Reading vision failed September 21, 1935.	H. M. 1 foot	Intumescent opalescent cataract, a. c. very shallow.	October 16, 1935, entrance to eye as above, capsulotomy, nucleus expressed and cortical debris removed with Hess spoon. Peripheral iridectomy.	Slight vitreous loss	15/15 Same correction as above
V. M. Right eye	F.	55	November, 1933, to June, 1935. 165 mgs.	Autumn, 1934	H. M. 1 foot	Silvery white, satiny, soft appearing, swollen cataract with broad white spoke-like striations from periphery to center.	Extraction with Weber loop after incision and iridectomy November 1, 1935.	Retrobulbar hemorrhage	10/200 +10.0 +2.0 ×180°

(Continued on Next Page)

TABLE 1.—*Summary of Operative Cases and Postoperative Results—(Continued)*

Name	Sex	Age	Dinitrophenol	Vision Impaired	Vision Before Operation	Examination	Operation	Complications	Vision P. O.
V. M. Left eye	F.	55	Same	Same	Same	Same	July 10, 1935. Combined extraction with complete iridectomy.	None	20/15 +12.0=+2.25× 180 add +3.0
C. R. Left eye			May, 1934, to May, 1935, one capsule daily, increased to two.	December, 1934. Rapid recent loss.	Fingers 4 feet R. and L.	Typical silvery sectors, intumescent shiny appearance.	December 31, 1935, combined extraction with iridectomy, complete. Large lens, capsule in coloboma.	Repeated small hemorrhage from wound, though a. c. restored.	To be refracted
R. H. Left eye	F.	45	March, 1934, to June, 1934, as many as q. i. d.	February, 1935	R — 1/10 LL. P. and P. Ascorbic acid	Capsular changes, cortical cloudy with sectors, post cortex cloth of gold.	Linear, large nucleus, scissors to enlarge incision, round pupil, no iridectomy.	None	20/15 +13.0=+0.5 c x 180°
R. H. Right eye	F.	45	Same	Same	Same	Same	February 18, 1936 Same as above	None	To be refracted
A. H. Right eye	F.	72	Amount ?	August, 1934	H. M. R. and L.	Intumescent dilated pupils a. c. shallow.	Difficult incision capsule thin and burse, complete iridectomy.	Diabetic secondary cataract.	20/20 +9.0=+4.0 c x× 180°
R. B. Right eye	F.	32	April, 1934, to October, 1934, 1 up to 6 capsules daily.	September, 1935	R. fingers 2 feet. L. 4/10, ascorbic with chills and fever.	Wide pupil, iris bulging forward, a. c. shallow. Anterior subcapsular opacities.	October 24, 1935, combined extraction, peripheral iridectomy, knife touched capsule, soft masses out quickly.	None	15/10 +13.0=+2.0 c x 5
R. B. Left eye	F.	32	Same	Same	Same	Same	February 5, 1936, linear extraction, round pupil, no iridectomy, no lenticular remains.	Postoperative iritis	20/20 +11.0 sph.
G. G. Left eye	F.	39	July, 1933, to September, 1933, and June to July, 1934. Total dose, 435 mgs.	May 23, 1935. Light projection	Light projection	Mature intumescent cataract flocculent mass of silvery lens materials, anterior capsule ruptured, shallow a. c.	June 12, 1935. Combined extraction, complete iridectomy.	Slight vitreous presentation	20/20 +10.00=+3.0× 180° add 3.5
E. S. Left eye	F.	56	July, 1934, one capsule t. i. d. Total 15 capsules only.	July, 1935	Fingers, at 1 foot	Mature, silvery, shiny, cataract, shallow chamber.	February 4, 1936, combined extraction, extracapsular large yellow nucleus, iridectomy, black pupil.	None	To be refracted
S. S. Right eye	F.	35	May 3, 1934, to November, 1935.	November, 1935	H. M. right eye 20/20 left eye	Mature, silvery, fluorescent posterior. Cloth of gold opacities. Sector-like opacities.	February 25, 1936, linear extraction with conjunctival flaps. No iridectomy.	None	To be refracted 20/20 O. D. 11.50S= +.37×15
E. B. Right eye	F.	28	June and July, 1934. Four capsules daily. July, 1935, for two weeks.	January 24, 1936	February 20, 1936, R. E. 3/200 L. E. 15/50. February 25, R. E. fingers, 1 foot, L. E. 15/100.	Silvery sector-shaped opacities. Shallow a. c. Many miniature white dots throughout cortex.	February 26, 1936 Linear extraction	None	To be refracted 20/20 +120=+1.25×30

clinical picture described by the present authors. There may be required the coincidence of a number of unrelated events in order to start these peculiar cataractous changes. However, dinitrophenol can scarcely be the essential factor when identical changes are seen in those who have never taken this drug.

Experimentally, dinitrophenol does not produce cataracts in animals on a normal diet, but it is quite easy to produce cataracts, without the addition of dinitrophenol, in animals on diets containing an excess of lactose (milk sugar), with low or rich content of vitamin G (Morgan and Cook: Proc. Soc. Exper. Biol. Med., 1936, 34:281); and there are many other unbalanced or modified diets reported to produce these experimental cataracts.

*

W. D. Horner, M. D. (384 Post Street, San Francisco).—In the *Journal of the American Medical Association* of July 13, 1935, together with Doctors Jones and Boardman, I published a description of three cases of bilateral cataract which followed the administration of dinitrophenol for obesity, and which we had studied for several months. In this report we emphasized the rapidity of the lenticular changes and the failure of any sort of treatment to retard the process. We strongly recommended that administration of dinitrophenol be stopped immediately pending further study. Our original descriptions of these cataracts and the assumed connection with dinitrophenol have been borne out since by more than a dozen published articles.

As has been stated, the treatment of these cataracts, as in most others, is surgical. Withdrawal of the drug, local and general measures have failed to influence progress.

Fortunately, no other ocular structure appears to be harmed in these cases, so that the prognosis is excellent if the lens be removed.

My personal surgical experience in these cases comprises seventeen extractions, fourteen of which were done by me and three more at which I assisted. Nearly all were private cases. It is remarkable that we have had only one patient report to the University of California Eye Clinic with this type of cataract.

We employed a narrow Graefe incision in some and a keratome in others. All were done with round pupils, using a peripheral iridotomy in the Graefe incisions and none at all in the linear extractions.

Visual results in the seventeen extractions were excellent. Fifteen, or eighty-two per cent, obtained final vision of 0.8 or better. A needling will be required in the remaining three cases. Our most serious complications were two cases of iritis. One healed with vision of 0.8, the other will require needling at some later date.

SPINAL ANESTHESIA AND THE ANESTHETIST*

By W. L. Garth, M.D.
San Diego

Discussion *by Thomas O. Burger, M.D., San Diego; William W. Hutchinson, M.D., Los Angeles; Charles F. McCuskey, M.D., Los Angeles; Elmer M. Bingham, M.D., Riverside.*

MANY anesthetists have been more or less hostile to spinal anesthesia, partly because they have not developed a technique in which they could have confidence, and partly because its use has seemed to cut down the field of their work. This attitude among anesthetists has been engendered by the surgeons, many of whom have made a practice of administering the anesthetic themselves, then employing the referring doctor, an interne, or perhaps a convenient nurse, to look after the patient during the operation. As a result of this careless practice, the mortality incident on the use of spinal anesthesia has been too great, and this useful and valuable method has again been discredited.[1] However, when under the control of a competent and experienced anesthetist, with his knowledge of safety measures in connection with respiratory or circulatory failure, and with his gas-oxygen equipment at hand for instant use, spinal anesthesia becomes a relatively safe and satisfactory procedure. It seems, then, that every anesthetist should strive to perfect for himself a safe spinal anesthesia technique, so that when indicated he can wholeheartedly advocate its use. Briefly, then, we propose to outline such a technique.

PRELIMINARY EXAMINATION

First, is the preliminary visit to the patient, at which time his pulse and blood pressure should be checked and his general condition carefully appraised. This preoperative blood-pressure reading, taken before the ephedrin has been given, is absolutely essential if one is to correctly interpret the later changes to the best advantage. An effort should be made at this time to allay the fears of the patient, explaining something of the details of the anesthetic procedure if requested to do so, but by no means volunteering this information. The premedication which has been given should be noted; preferably, of course, it should have been arranged for previously in consultation with the surgeon. The use of a generous dose of one of the barbiturates is advisable, due to its protective action in the procain-sensitive individual. An average dose of one-sixth grain of morphin is indicated, but atropin should be omitted, since it tends to increase the heart rate, as does ephedrin. The usual dose of 50 milligrams of ephedrin should be ordered for administration, just as the patient enters the surgery. Contraindications to the use of spinal anesthesia, such as a history of coronary disease, advanced myocarditis, or the presence of any degree of shock, should be ruled out at this time. A pulse pressure of over 100, while not an absolute contraindication, should at least call for a reconsideration of the type of anesthetic to be used.

IMPORTANT FACTORS IN ADMINISTRATION OF ANESTHETIC

Regarding the administration of the anesthetic, we shall stress only the important points. First is position. Ordinarily it is best to make the injection with the patient lying on his side, his knees drawn well up on the abdomen, and his head bent downward as much as possible. One knee should be just over the other knee, the upper foot just over the under foot. The arms should be so disposed that the shoulders are as nearly as possible in a perpendicular line to the table. In case difficulty is encountered, it will often be found of great advantage to make the tap with the patient in the upright position. (Caution—Use no hypobaric solutions.) The method for doing this is to have the patient sitting on the side of the table, supported by an attendant, his feet resting on a stool, his back bent forward and downward as

* Read before the Anesthesiology Section of the California Medical Association at the sixty-fourth annual session, Yosemite National Park, May 13 to 16, 1935.

much as possible. The upright position is especially desirable in dealing with the obese patient, and every anesthetist should familiarize himself with its use.

With the patient in the selected position, draped and ready, the iliac crest should be located, this level being approximately that of the fourth lumbar interspace. The skin and subcutaneous tissues over the third space, also the deeper tissues on each side of the interspinous ligament should then be thoroughly infiltrated with .5 per cent procain solution, which makes possible a painless tap. While waiting for this to take effect, the ampoule of procain can be opened, the spinal needle (Pitkin type, 21 gauge) selected and tested, and a final check made as to the patient's position. At this time an attendant should support the patient in position, holding him securely until the tap is made and the injection completed. The needle should be introduced just below the appropriate spinous process, angling slightly upward, so as to avoid contact with the spine below. After the point has pierced the skin and subcutaneous tissues, it is well to check up on its direction, since in forcing it through these tissues it often gets out of line. The needle is then pushed in slowly and guardedly, until a slight click or give is felt, which usually marks its emergence from the interspinous ligament. Upon introducing it a few millimeters further, another click is felt, which indicates that the spinal canal has been entered. When the stylet is removed, spinal fluid should flow freely, and a slight turning or inward movement of the needle should not interfere with this flow.

AMOUNT OF SPINAL FLUID

Regarding the amount of spinal fluid to use, Bingham [2] and others have shown by their model canal experiments the tremendous importance of "drift" in determining the distribution of the injected procain. A five per cent mixture of procain in spinal fluid, a dilution not uncommonly used, layers out very rapidly, the bulk of the injected solution reaching the low points in a test canal within less than one minute. Concentrations up to 10 per cent, commonly used in the past, carry some threat of a resultant nervous system lesion [3] and, in connection with the use of Trendelenburg position, very definitely increase the hazard in spinal anesthesia. It seems desirable, then, to use as low a concentration of procain as is practicable, which is about 3 per cent. Drift is thus minimized, damage to the cord is avoided, and spinal anesthesia results become much more predictable. Even when using these dilute solutions of procain, it is advisable not to place the patient in Trendelenburg until ten minutes have elapsed, so that the bulk of the dose will have been absorbed, hence, can no longer drift.

Having withdrawn the predetermined amount of spinal fluid, it should be thoroughly mixed with the procain and reinjected. The patient should be required to turn on his back immediately, cold towels placed over his eyes, and the blood pressure cuff applied to his arm. While this is being done the patient should be reassured as to the numbness in his legs, and as to what else he is to expect. It is important to tell him that he will feel the "prep" solution, for instance, and that he may feel other things touching him, even pulling at him, but that he will surely feel no pain. He should be encouraged to breathe more rapidly, or deeply, or both, and the extent of his respiratory excursion must be closely observed. Should this diminish markedly at any time, it is wise to begin the administration of oxygen at once, not waiting for untoward symptoms to develop. Nausea and retching can usually be entirely avoided if this is done, which is worth while from the standpoint of comfort alone. The blood pressure will also be better sustained and, most important, the deleterious effects of anoxemia on the heart will be avoided. All poor-risk patients, also all upper abdominal cases, should have oxygen administered throughout their operation. The pulse and blood pressure should be checked at least every five minutes, and charted graphically. Only by the conscientious use of such a chart can the subsequent changes in the patient's condition be interpreted to best advantage, and remedial measures instituted at the proper time. The practice of taking only occasional pressure readings at one's convenience is a slipshod method, and is not to be tolerated if the best results from spinal anesthesia are to be obtained.

Fig. 1.—Spinal anesthesia and the anesthetist. Model canal demonstration of drift.

Tube contains a dextrose saline mixture, made up to specific gravity 1.006, which is that of the average spinal fluid.

One hundred and fifty milligrams of procain, mixed with 3 cubic centimeters of the dextrose saline solution (5 per cent concentration), and colored with a drop of methylene blue, is injected through the rubber connection at the hypothetical lumbar region.

The surprising rapidity with which the procain solution seeks the lowest levels in the canal illustrates the importance of drift in spinal anesthesia.

TREATMENT OF COMPLICATIONS

In case of an early alarming fall in blood pressure, together with other signs of hypersusceptibility or of overdose, such as loss of voice, pain in the throat or chest, or inability to breathe, carbon dioxid and oxygen should be started immediately and .5 cubic centimeters of adrenalin given. If the operation has not been started, the surgeon should be required to wait a few moments. If he has begun his work, he should be requested to stop and to continue only when the situation is definitely under control. These procain-sensitive patients must be spared the shock of any operative procedure while they are recovering from their attack of drug poisoning. They will usually recover sufficiently within a very few minutes so that the operation can proceed, but once in a thousand times or so it would undoubtedly be better to postpone the surgery, doing it later under a general anesthetic. Probably we should use a procain sensitivity test on all of our spinal anesthesia

patients, just as routinely as a clotting time is done preceding tonsillectomy. But until we do so we must keep in mind that certain individuals are procain-sensitive, and act accordingly.[4]

A later marked drop in pressure may occur about twenty or twenty-five minutes after the administration of the anesthetic, its abruptness often being indicative of its probable severity. Prompt treatment is called for, since it is much more difficult to influence the pressure once it has reached the shock level. The head of the table should be lowered, and carbon dioxid and oxygen administered freely. In the presence of anoxemia ephedrin is actually contraindicated,[5] but with the patient breathing oxygen an additional dose of ephedrin will usually help. The important thing, of course, is the pulse pressure. As long as this stays above 20 millimeters, one should not be too much concerned about a pressure drop, particularly if it is symptomless. When the cause of the fall in pressure is hemorrhage, as occasionally happens, it must be treated by the prompt use of intravenous fluid, preferably 5 per cent glucose, in whatever quantity is needed to restore the pressure to a reasonable level. In the meantime, the first thought is to get the patient's head down as much as is possible under the circumstances, placing the patient in extreme Trendelenburg unless it interferes too much with the work of the surgeon. Then, if the hemorrhage has been quite severe, arrangements for a transfusion should be made, to follow immediately.

ACCESSORY AIDS

A completely equipped gas machine should be instantly available, since supplementary anesthesia may at any time be needed. Even if good surgical anesthesia has been obtained, certain patients will require an analgesic dose of a general anesthetic to keep them comfortable and under control. Gas is the only satisfactory agent, since the surgeon need hardly pause in his work while induction is completed; whereas if ether must be used there is often a trying period of inaction for the surgeon and of stress for the anesthetist. Provided the spinal block has been successful, and that gas is only needed for analgesia, nitrous oxid with generous amounts of oxygen is to be preferred. But if anesthesia is only partial the addition of ether will usually be required.

At the close of the operation, carbon dioxid and oxygen should be given freely, so that the lungs are well aerated, to avoid atelectasis. Unless this is done routinely these patients will develop pulmonary complications just as frequently as though they had had an ordinary ether anesthetic.[6] If the operation has lasted only thirty or forty minutes, so that the spinal effect is still but little diminished, it is necessary to keep the patient in Trendelenburg position while returning him to his room, and also to have the foot of the bed elevated. Otherwise he may be subject to a violent drop in pressure at the time his position is changed, particularly if he has been in a marked degree of Trendelenburg on the table. Substandard risk patients, and any others whose condition at the end of the operation is not entirely satisfactory, should also be kept in the head-down position while being moved to their rooms, and for several hours afterward. In fact, if the hospital equipment is such that this can be done conveniently, it would probably be better to handle all postoperative patients in this manner.

Occasionally, perhaps once in a thousand times, breathing will be so seriously interfered with that artificial respiration will be required temporarily. It is a life-saving procedure when indicated, and every anesthetist should realize that, barring accident and causes aside from the anesthetic itself, the patient will never die on the table if properly cared for in this respect. Animal experiments have demonstrated,[7] and experiences with tremendous accidental intraspinal injections of local anesthetics in human beings have proved this to be a fact.

SUMMARY

1. Spinal anesthesia is again falling into disrepute, due to widespread carelessness of persons using the method.

2. Professional anesthetists should recognize its value, develop for themselves a safe technique, and, when indicated, wholeheartedly advocate its use.

3. Some factors in a safe technique are:

(*a*) Careful selection of patients, ruling out of cardiac cripples and those in shock.

(*b*) The use of low concentrations of procain and the absolute avoidance of the early use of Trendelenburg position to minimize "drift."

(*c*) Conscientious minute-to-minute care of the spinal patient by a competent, experienced anesthetist.

(*d*) Free use of oxygen and carbon dioxid for all poor-risk patients, and for others, as indicated.

(*e*) The life-saving value of artificial respiration in caring for the occasional patient who does poorly under spinal anesthesia.

233 A St., San Diego.

REFERENCES

1. Babcock, Myra E.: Spinal Anesthesia Deaths—A Survey, Anes. and Anal., 11:184-88 (July), 1932.

2. Bingham, Elmer M.: Specific Gravity in Spinal Anesthesia, Calif. and West. Med., 41:251 (Oct.), 1934.

3. Lindemulder, F. G.: Spinal Anesthesia—Its Effects on the Central Nervous System, J. A. M. A., 99:210 (July), 1932.

4. Waldron, G. W.: Hypersensitivity to Procain, Proceedings of Staff, Mayo Clinic, 17:245 (April), 1934.

5. Severs, M. H., and Waters, R. M.: Circulatory Changes in Spinal Anesthesia, Anes. and Anal., 11:85 (March), 1932.

6. Foss, H. L., and Schwalm, L. J.: Relative Merits of Spinal and Ether Anesthesia, J. A. M. A., 101-1711 (Nov.), 1933.

7. Bower, J. O., Clark, J. H., Wagoner, G., and Burns, J. C.: Spinal Anesthesia—Clinical and Experimental Investigation, S. G., and O., 54:882-97 (June), 1932.

DISCUSSION

THOMAS O. BURGER, M. D. (Medico-Dental Building, San Diego).—Spinal anesthesia is a world-wide, established method of anesthesia for surgery of the lower half of the human body. However, there are many considerations that enter into its use. First, is the surgeon's selection of patients that are proper for its use. Second, and of probably greater importance, is the anesthetist who administers a spinal. It still holds that ether is the choice of

anesthesia if just any doctor you can pick up is to give it. The giving of gas requires a trained anesthetist, but I feel that spinal requires a skilled, meticulously careful anesthetist, of which Doctor Garth is the type. Any slight slip or negligence may be very disastrous, and for this reason many failures and criticisms have been unjustly made against spinal.

We do admit that spinal is not perfectly controllable, nor does it act alike for all patients, although the same amount of novocain, the same amount of spinal fluid and the same interspace is used. Doctor Garth's illustration gives some reason for the discrepancies and is well worth considering.

We still like to elevate the lower extremities so that gravity will help to keep more blood to the vital centers instead of gravitating to the lax vessels in the legs, and so keep the blood pressure from dropping so much. We do not see many of the severe blood-pressure drops that occurred earlier, neither do we have headaches, except occasionally.

We have had about two thousand spinals and do not regret the large proportion. A few cases may have been disturbing and one disastrous. The only death, we feel now, could have been avoided. The ideal operating safety for the patients, from the standpoint of relaxation and lack of rough handling of abdominal structures, we firmly believe, has saved many more than the one lost.

I cannot see any reason for considering Pitkin's solution or any other than pure novocain crystals dissolved in the patient's spinal fluid. This is more physiologic, and gives the greatest margin of safety.

I wish to compliment Doctor Garth on his paper, a real value in emphasizing important demands if spinal anesthesia is used. Those surgeons who went on record as "agin it," when spinal technique made it satisfactory, are mostly still "agin it," and others who cannot finish in the forty-five minutes time limit all help to condemn spinal anesthesia; but I still feel it is the ideal anesthesia for many lower abdominal sections.

❦

William W. Hutchinson, M. D. (1930 Wilshire Boulevard, Los Angeles).—Spinal anesthesia, if administered and constantly supervised by an experienced anesthetist, is a comparatively safe procedure. Accidents occur on rare occasions; but mention any anesthetic in which accidents do not occur!

The preliminary knowledge of the patient's condition by the anesthetist is absolutely essential, and he should be the one to prescribe the preliminary medication. I feel that the barbiturates are indicated, not only for their protective action, but to allay the fear of the patient and to prevent psychic shock.

One point in technique which I have found to be of great advantage is the use of the Sise guide. This not only aids in directing the spinal puncture needle, but also prevents the point which enters the dura from coming in contact with the skin.

My personal feeling is that "drift" may be overemphasized, as I do not think that the flow of fluids in an unobstructed glass tube is analogous to the flow of fluids in a complicated system like the spinal canal.

If supplemental inhalation anesthesia does become necessary it should be given early, as soon as the patient shows signs of restlessness, and before pain is complained of. If this is done, in all probability, only an analgesic dose will be required; but if the anesthetist waits until the patient is complaining of actual pain, it has been my experience that induction is slow and very difficult, and much valuable time is lost during which the surgeon must stop work, due to straining and abdominal tension.

Spinal anesthesia is a valuable procedure and in selected cases is next to indispensable. The method should not be condemned if trouble arises when the anesthetic is administered by the inexperienced or is carelessly supervised after the puncture, any more than a valuable surgical procedure should be condemned because an inexperienced surgeon, unfamiliar with the technique, has failures or possibly loses a case.

I agree heartily with Doctor Garth's conclusions, and compliment him on his paper.

Charles F. McCuskey, M. D. (3435 Amesbury Road, Los Angeles).—Spinal anesthesia undoubtedly has a place in the field of surgery as one of the methods of anesthesia. In my opinion its use should be reserved for those cases in which a general anesthetic is contraindicated, or where the quiet abdomen and extreme muscular relaxation will facilitate the work of the surgeon sufficiently to justify an increased anesthetic risk.

Babcock's statistics indicate a mortality of approximately 1:1000 in properly selected cases. The Charity Hospital in New Orleans reports 31,000 spinal anesthetics in the past ten years with twenty-eight deaths on the table or before the anesthesia had worn off. They also made a study of postoperative pulmonary complications following the use of spinal and general anesthesia. In a series of 3,364 cases in which accurate records were kept, 1,668 were upper abdominal operations and 1,696 were lower abdominal. Of this group 4.19 per cent had postoperative pulmonary complications. Of these, 4.8 per cent occurred in the upper abdominal group and 3.5 per cent in the lower abdominal group.

Where spinal anesthesia was used alone, 4.02 per cent had pulmonary complications; and where it was necessary to combine spinal with some form of general anesthesia, 8 per cent had pulmonary complications. When inhalation anesthesia was used alone, 4.44 per cent had postoperative pulmonary complications.

Doctor Garth has described a very satisfactory method for the administration of spinal anesthetics. This is something each individual must work out for himself, keeping in mind that the duration of anesthesia is determined by the amount of procain injected, and the height of anesthesia is regulated by the volume of solution injected; also the rate of injection and the size of the spinal puncture needle used.

The advisability of having available at all times during spinal anesthesia a satisfactory means of administering oxygen intratracheally in case of respiratory paralysis, cannot be overemphasized. This will undoubtedly avoid some of the fatalities when drugs that paralyze respiration ahead of the heart are used as the anesthetic agent.

❦

Elmer M. Bingham, M. D. (Riverside County Hospital, Riverside).—The antagonism which existed a few years ago toward spinal anesthesia was certainly fostered by the attitude of the surgeons. Unfortunately, some surgeons are still administering their own spinals, and leaving the aftercare in inadequate hands. They should realize that the subsequent observation is of as much, or more importance than the administration of the anesthetic.

Too frequently still the anesthetist sees the patient for the first time in the operating room, preoperative medication being ordered by the surgeon without consultation. We find cases where the type of anesthetic is similarly chosen.

I agree without reservation to the preoperative medication and technique as outlined. I do not like to see patients knocked down by morphin and scopolamin to the point that respiration is depressed and coöperation eliminated.

I am convinced that the consideration of specific gravity is the most important factor in administering spinal anesthesia. The demonstration with the model spinal canal is striking and convincing. It could and should be demonstrated to every medical student or interne. Before he administers spinal anesthesia to patients, let him try the glass canal for himself.

I believe anesthetic solutions that are heavier than spinal fluid are more easily controlled. Occasionally the anesthetic level is not high enough, but, properly controlled, will never be too high. The following note was found in the seventh edition of Morris' "Human Anatomy" (1925), page 1409, shortly after I had submitted my first experiments with the glass canal: "In the supine position the lowest part of the subarachnoid space is in the midthoracic region, and an anesthetic fluid, nondiffusible and of higher specific gravity than the cerebrospinal fluid, will tend to gravitate there. The level of anesthesia can be varied by raising the pelvis or shoulders to different levels."

Finally, the choice of anesthetic must include consideration of facilities and ability. For this reason spinal anesthesia at our County Hospital is the one of choice where absolute contraindications are not present.

MALIGNANT TUMORS OF THE TESTIS*

By GEORGE D. MANER, M.D.
Los Angeles

DISCUSSION *by E. M. Butt, M. D., Los Angeles; A. G. Foord, M. D., Pasadena; Zera E. Bolin, San Francisco.*

IN the testes one finds a great variety of malignant and benign tumors ranging from highly undifferentiated, malignant round-cell tumors, apparently uniform in structure, up to complex ones composed of adult tissue. The diversity of opinion existing as to the interpretation and classification of these tumors is as varied as their structure. Even today we find little unanimity of opinion; it seems that the histologic diagnosis and interpretation appear to depend largely upon the personal inclination of the pathologist or surgeon examining the material.

NATURE OF TUMORS OF THE TESTICLE

The controversial nature of these tumors dates back to 1696, when St. Donat first described a complex tumor in a testicle. Johnson, in 1854, first identified elements of all primitive germ layers in one of these tumors, and his findings were confirmed microscopically by Langhans and Kocher in 1877. These observers were the first to lay the basis for an accurate classification according to microscopic study. Several years later, Wilms reviewed the subject and simplified somewhat the complex problem by recognizing the tendency of one element in a teratoma to predominate over others. He was the first to postulate the theory that teratoma were derived in some fashion from sexual cells, and that adenoma, carcinoma and the like arose from the tubular epithelium, while leiomyoma, fibroma and sarcoma were derived from the stroma cells. Later Wilms, upon reëxamining tumors previously considered as homologous, such as carcinoma, chondroma, sarcoma, found derivatives of all three layers in them and revised many of his former conclusions. Pick also observed the tendency of one element to predominate or even suppress all the others.

CHEVASSU'S VIEWS

In 1906 Chevassu agreed in principle that many of these tumors were tridermal in origin, but contended that a large number (about 50 per cent) were homologous, were unrelated to teratoma, and were derived from the spermatocytes rather than embryonal sex cells. He termed these tumors "seminome" (now anglicized to seminoma). His conclusions were based largely upon the fact that the characteristic seminoma cell was identical in morphology with the spermatocytes.

EWING'S CONCLUSIONS

In 1911 Ewing reviewed the subject and published a most important contribution to the pathology of these tumors. He challenged the views of Chevassu, and concluded that practically all testicular tumors were teratomatous. In his article he says: "All common, and nearly all rare tumors of the testes, arise from totipotent sex cells in the neighborhood of the *rete,* whose normal development into spermatogonia has been suppressed, but whose potencies remain intact and ready to express themselves in the various forms of simple or complex tumors. . . . The monodermal forms of these growths represent one-sided developments of tridermal teratoma. Very rarely do stroma, duct cells, interstitial cells, or adult seminiferous tubules give origin to characteristic growths."

In 1925 Hinman, Gibson and Kutzman confirmed Ewing's findings, concluded that the preponderance of evidence was in favor of Ewing's theory, and considered the term seminoma as a misnomer.

THE TWO SCHOOLS OF THOUGHT

From these investigations there has developed two opposing schools of thought. Ewing, Martland, Hinman, Gibson, and others, contend that "for practical purposes there is only one tumor, viz., a teratoma." Chevassu, Schultz, Eisendrath, Bell, and others, contend that, in addition to the heterologous tumors, there are a large number of pure homologous tumors, so-called seminoma.

Unique and convincing arguments, backed by evidence, have been brought forward by proponents of both schools, but it is needless to review them as there is nothing new to add. In the last analysis we have to consider but two types of malignant tumor: the teratoid or mixed tumor, and the apparent unicellular type of tumor, viz., seminoma or embryonal carcinoma.

The entire question as to the pathology and classification of these tumors could be simplified if we would accept Ewing's viewpoint, in that the seminoma merely represents a monodermal overgrowth in a tridermal tumor. It was with this idea in mind that this study was instituted.

A pathologist receiving surgical pathologic material from a good-sized general hospital population is impressed, and to a degree amazed, by the great confusion existing in the general surgeon's mind as to the classification and nomenclature of these tumors, as well as the origin and degree of malignancy of the various types encountered, and the varied and even different choice of therapeutic methods selected. To a degree the rarity of these tumors may be blamed for some of the confusion and lack of information, since they constitute only about 0.5 per cent of all male hospital admissions.

CLASSIFICATION OF HINMAN AND GIBSON

Hinman and Gibson, in their publication, proposed a convenient and satisfactory classification in that it is simple but still includes the essential pertinent facts. They considered all malignant testicular tumors as heterologous in type. A part of their classification dealing with malignant tumors of testes is appended.

II. Heterologous tumors (teratomata).
A. Benign:
(1) Adult teratoid tumors.

* Read before the Pathology and Bacteriology Section of the California Medical Association at the sixty-fourth annual session, Yosemite National Park, May 13-16, 1935.

B. Malignant:
(1) Embryonal carcinoma (heterologous elements may be present or have been overgrown).
(a) Trophoblastic (chorio-epithelioma).
(b) Hypoblastic.
(c) Epiblastic.
(d) Seminome (mesoblastic?) (embryonal carcinoma of Ewing).
(2) Sarcomatous mixed tumor (very rare and probably represent one-sided developments of teratoma).

Since the publication of this classification, I have preferred to follow it, recording diagnoses as malignant teratoma of testis, seminoma variety; or malignant teratoma, adenocarcinomatous in type, etc., or using some such qualifying phraseology as applied to different tumors, thus informing the surgeon as to the type of tumor he is dealing with. This information is important, as there appears to be vital clinical, pathologic and biologic differences in the various varieties, particularly as to the mode of development, and rapidity and structure of primary metastases; period of expectancy, radiosensitivity, and behavior of Prolan A (follicular ripening hormone of the anterior pituitary) output in the urine.

FERGUSON'S CONTRIBUTION ON THE BIOLOGIC PHASES

Ferguson's valuable contribution on the biologic phase of the subject of testicular tumors deserves especial mention. He finds that the Prolan A content of the urine varies in proportion to the embryonal character of the tumor, and thus in relation to the structure of the tumor. He classes tumors, according to amount of hormone excretion, in the following order: (1) chorio-epithelioma, (2) embryonal adenocarcinoma, (3) embryonal carcinoma with lymphoid stroma, (4) seminoma, (5) teratoma with adult characteristics. From these investigations he has been able to work out a definite, quantitative relationship existing between the degree of radiosensitivity to the excretion of Prolan A, thus: the greater the amount of hormone excreted, the more sensitive the tumor. He is also of the opinion that a quantitative biologic assay is a more valuable index as to radiosensitivity than histologic interpretation.

His investigations show that not only can a diagnosis of the primary tumor or occurrence of metastases be determined by assay of hormone excretion, but that it is also of value in differentiating the various types of teratoma. The hormone excretion level varies in different varieties of teratoma as follows:

Chorio-epithelioma, 50,000 or more mouse units per liter.
Embryonal adenocarcinoma, 10,000-40,000 mouse units per liter.
Embryonal carcinoma with lymphoid stroma, 2000-10,000 mouse units per liter.
Seminoma, 400-2000 mouse units per liter.
Adult teratoma, 50-500 mouse units per liter.

It seems significant that all these varieties of tumors, including even the seminoma, give rise to Prolan A, and that they fall in such well-defined groups. The mechanism of the hormone production is not definitely understood, even in pregnancy. It reaches its highest concentration in chorio-epithelioma, both in the female following pregnancy and in chorio-epithelioma testis, where the type cell is predominantly trophoblastic. The specific hormone is also excreted in the urine in certain other tridermal tumors, but in very few if any extragenital malignant tumors in the male. Thus it seems that its presence in testicular tumor cases is presumptive evidence of the tridermal origin of these tumors.

Prolan A determinations have been performed in only four of these cases, so that data is insufficient to include in this report.

MATERIAL USED IN THIS ANALYSIS

The basis for this report is a histopathologic analysis of seventeen primary testicular tumors to determine the frequency with which the characteristic seminoma cell occurred in association with tridermal elements in heterologous tumors and, conversely, to determine the incidence, degree and variety of heterologous elements in the so-called homologous (seminoma) tumors. At first it was intended to include twenty-five tumors, but some of the material was derived from metastases obtained at autopsy in which the primary tumor was not available.

It may be in order to relate a few interesting facts concerning these cases. It is significant that the seventeen patients were operated upon by fourteen different surgeons; one surgeon removed three and another removed two of the tumors. Simple castration was done in each instance, and the greater number were given postoperative irradiation. Only one patient was subjected to preoperative irradiation, viz., the chorio-epithelioma case, who is now alive and evidently well at the end of five years and three months. Of the entire series eleven are dead, six are living, but of these, two have only been recently (one and two months) operated upon. All cases were subjected to the same operative treatment, and for general purposes to the same radiation technique; and yet no two cases were identical histopathologically, whether surviving or dead. (See Chart 1).

INTERPRETATION OF THE CHART

On the accompanying chart are recorded the various mesoblastic, hypoblastic and epiblastic representatives, as well as the trophoblastic elements and characteristic seminoma cells found in each tumor. An attempt was made to estimate and list them according to relative percentage incidence; thus the symbol ++++ indicates that this element or elements were predominant.

A simple glance at the chart will acquaint one with the remarkable structural variations encountered. The greater number fall in the group of embryoid tumors, in which either the hypoblastic elements or the characteristic "seminoma" type of cell appear to play the dominant part in conferring malignant potentialities. The term "seminoma cell" is used in a general descriptive sense only; no attempt is made to classify it.

Not a single adult embryoma was found.

The term "teratoma" should be applied only to tumors composed of elements derived from all

CHART 1.—*Tumors of the Testicle*

No.	Age	Mesoblastic		Hypoblastic		Epiblastic		Trophoblastic	Seminoma
		Benign	Malignant	Benign	Malignant	Benign	Malignant		
1	26	+	+	++	++++	++	+	+	+
2	26	++	0	+	++	++	+	+	++++
3	38	0	0	+	0	+	0	Trace	++++
4	29	+	+	++	+++	+	+	0	Trace
5	29	0	0	0	+	0	0	++++	0
6	31	+	+	+	++	+	0	+	+
7	23	+	0	++	++++	+	0	0	+
8	27	++	0	+	+++	+	0	0	+++
9	20	++	0	+++	0	+	0	0	+
10	P	++	+	+++	0	++	0	0	0
	36								
	M	+	0	+	+++	+	0	0	+
11	37	0	0	0	+	0	0	0	++++
12	36	0	0	+	0	+	0	0	++++
13	33	+	0	+	++++	+	0	+	0
14	47	0	0	0	+	0	0	0	++++
15	35	0	0	0	+	0	0	0	++++
16	28	+++	0	++	+	+++	0	0	+
17	33	0	0	0	0	0	0	0	++++

P. Primary tumor.
M. Metastatic tumor.

three primary germ layers. In these malignant complex testicular tumors representative elements of only two layers, and occasionally only one layer, are usually found, so the term "teratoid" is preferable over the rigid term "teratoma."

In this series we find seven cases which could be considered as monodermal tumors, depending upon the inclination of the observer, the characteristic seminoma type of cell predominating; but in six of the seven cases representatives of one or more primary germ layers were also present in some degree, and only in one instance were they not found (Case 17). Thus it seems that we have only one monodermal tumor or seminoma. Conversely, in the teratoid group, comprising ten of the number, characteristic seminoma cells in varying amounts were found in every case except one. In the seventeen primary tumors, seminoma cells were found in all but two, one being trophoblastic. This characteristic cell was present irrespective of whether the predominating elements were epiblastic, hypoblastic, or mesoblastic. It seems that in the smaller seminoma type of tumor tridermal elements were more abundant and more easily found than in the larger ones, thus bearing out Ewing's view, that in the larger seminomata the tridermal elements are crowded out—probably because of the rapid growth capacity of this cell.

In this group we find only one apparently pure or homologous seminoma type tumor (No. 17) and five (Nos. 3, 11, 12, 14 and 15) almost pure seminomatous tumors. In two cases (Nos. 2 and 8), although seminoma cells were in abundance, other elements from one or more primitive germ layers were represented in differing degrees and in varying grades of complexity, so as to leave no question as to their teratoid origin. In the chorio-epithelioma a small amount of adenocarcinoma was found. Only one tumor (Case 6) was found in an undescended testicle.

Since the greater number of testicular tumors show highly variable complex histologic characteristics and considerable variation in individual germ-layer representation in different specimens, and even in different portions of the same specimen, it is unwise to examine only single, or two or three sections in a given tumor and attempt to draw conclusions. One cannot obtain a true interpretation except from multiple sections. In Case 10, originally only a part of the primary tumor was received for examination; history was not available. Multiple sections were made, and only benign or differentiated mesoblastic, hypoblastic and epiblastic elements were found, and so a diagnosis of probable benign teratoid tumor was given. Later another specimen was received labeled "retroperitoneal tumor," and examination of this revealed malignant hypoblastic representatives as well as other elements, and even islands of characteristic seminoma cells.

In these tumors, cells from the individual primitive germ layers may proliferate at different times and stages of development and at different rates, so that it is hazardous to attempt to predict which element or elements will predominate in either the primary tumor or its metastases.

IN CONCLUSION

Perhaps no definite conclusions can be drawn from this study, which covers only a compara-

tively few cases; but at least one is justified in inferring that the greater number, if not all, malignant tumors of the testicle are primarily tridermal in origin, and for practical purposes can and should be considered as such.

I am of the belief that pure homologous (so-called monodermal or seminoma) tumors do not exist, and that if this type of tumor is subjected to severe histopathologic analysis, it will be found to represent merely an overgrowth of one malignant element at the expense of all other blastodermic derivatives. This contention is substantiated by the demonstration of representatives of one or more blastodermic derivatives in all the tumors in this series with one exception, whether the predominant type of cell was adenocarcinomatous or seminoma in type.

657 South Westlake Avenue.

DISCUSSION

E. M. Butt, M. D. (3551 University Avenue, Los Angeles).—Doctor Maner's paper emphatically recalls to our attention that the majority of malignant tumors of the testicle are teratoid in origin, tridermal in constitution, and not homologous or single-cell tumors arising from adult tissues. This is an old problem that has been studied by such able men as Ewing, Wilms, Pick, Hinman, and others. These investigators have produced an overwhelming amount of evidence to refute the contentions of Chevassu in regard to the histogenesis of the tumor, which he has termed "seminome." Furthermore, the works of these men have served greatly to simplify the classification of tumors of the testis. And yet one cannot help being impressed with the confusion that prevails as a result of the diversity of opinions regarding this subject, as are recorded in the literature and some textbooks. This confusion clearly emphasizes the need of such papers as Doctor Maner's and, too, the need of subjecting testicular tumors to an accurate histopathologic study.

It is important to note that in eight of the tumors of the testis reported by Doctor Maner, the predominating cell type is the cell of the "seminome," and that seven of these tumors contain heterologous elements. Furthermore, it is noted that in seven of the seventeen tumors "seminome" cells are found associated with predominating hypoplastic or epiblastic elements. These facts serve to establish beyond a doubt that the "seminome" of Chevassu is of teratoid origin.

*

A. G. Foord, M. D. (Pasadena Hospital, Pasadena).—Doctor Maner's presentation as to the nature and pathologic histology of testicular tumors is marred by two noteworthy omissions. First, he has modestly neglected to state that he studied thousands of microscopic sections before he was able to find that sixteen out of seventeen cases showed other tissue elements than the usual seminoma cell. This is particularly important, since the usual practice in the routine examination of tumors is to section a few blocks and diagnose from these as to the histologic components of the tissue. Second, he has neglected to state definitely what he means by the terms mesoblastic, hypoblastic, epiblastic, and trophoblastic. I trust that he will cover this in his discussion, in order that the pathologist who is not particularly inclined embryologically can thoroughly appreciate the microscopic components included in Chart 1. From my own experiences, I believe that Doctor Maner's final deductions are sound, and that Ferguson's work biologically supports his view. However, from the standpoint of the individual patient, I fear that, so far, fine points of histologic studies have added little to the ultimate prognosis; but it is hoped that further advances in radiology will come to our aid. The first step, naturally, is the continued proper histologic analysis of the testicular tumors, as has been done in this paper, and later correlation of the clinical results from surgery and radiation in the various types of tumor.

Zera E. Bolin, M. D. (490 Post Street, San Francisco).—Tumors of the testes, theoretically, may arise from the sperm cells in any stage of their development; from the tubular epithelium; from the stroma; or from the blood vessels or nerves. Practically, however, there is seen but one malignant tumor of the testes. This has been divided by surgeons into teratoma and seminoma. I do not agree with the view of Chevassu that the so-called seminoma arise from spermatocytes. I believe no one has shown, histologically, that such a relationship exists. I agree thoroughly with Doctor Maner that there is only one tumor of the testes, and that this should be classed in the teratoma group. I think that Doctor Maner has proved his point by his method of taking multiple sections. In a series of testes removed at necropsy and subjected to intensive examination, 1.2 per cent of all organs examined revealed the presence of small tumors which were histologically teratomatous in nature.

It is of extreme interest, along the line of the Prolan A test, that Ferguson was able to obtain a positive assay in all of his testicular tumors. I believe that Doctor Maner has settled the argument and that we can conclude that the so-called seminoma does not exist as a tumor entity. I believe that we can all subscribe to the belief that the various tumors are developments from teratoma with a one-sided proliferation. Incidentally, it is interesting to note that the type of operation, in most of these cases, was orchidectomy and orchidectomy only.

THE SUBTHYROID CHILD*

By Edward J. Lamb, M.D.
Santa Barbara

Discussion *by Donald K Woods, M. D., San Diego; Helen Pryor, M. D., Palo Alto; Henry E. Stafford, M. D., Oakland.*

IT is not the purpose of this paper to discuss all the various manifestations, signs, and symptoms of hypothyroidism in children; but rather to enumerate some of the clinical signs and symptoms, and to discuss some of the laboratory means available for making a diagnosis of hypothyroidism. It is of paramount importance that hypothyroidism in children be detected early, in order that treatment be instituted before rehabilitation becomes too limited.

The growth and development of the child is dependent on an adequate source of diet, vitamins, and a proper balance of endocrine hormones.

ENDOCRINE INFLUENCE ON GROWTH AND DEVELOPMENT

The voluminous literature devoted to growth and development, from the endocrine standpoint, is quite disconcerting to one who wishes to be conservative in his diagnosis and treatment of hypothyroidism.

Perhaps more voluminous has been the literature on the relation of vitamins to growth and development, with comparative delineations of white rats fed or deprived of certain vitamins.

It is to be expected, then, that a real doctor's dilemma has perhaps resulted, since both vitamins and endocrines are vying for first place in the development and nutrition of the child.

Science has proved the merit of vitamin B as essential for the growth and development of ani-

* Read before the Pediatric Section of the California Medical Association at the sixty-fourth annual session, Yosemite National Park, May 13–16, 1935.

mals and human beings. Vitamin A is directly or indirectly responsible for iodin distribution in the body. Vitamin D is essential for the proper distribution of calcium. The thyroid gland is perhaps the chief regulator of both iodin and calcium metabolism. The similarity of the chemical structural formulae, of certain vitamins to certain endocrine hormones, has been responsible for the terms exogenous and endogenous hormones being applied to vitamins and endocrine hormones, respectively.

The administration of these exogenous hormones (vitamins) will not suffice if there is an inactivity or imbalance of certain endogenous hormones (endocrines). Life, then, would appear to be a continuous adjustment of endogenous and exogenous hormones to body metabolism. A knowledge of any endocrine inactivity should be of more than academic interest, since therapeutic program is dependent on it.

Endocrinology is not a new science. It is not a specialty unto itself. It is an integral part of pediatrics. The very foundation for this branch of medicine was laid a quarter of a century ago by such eminent pediatricians as Sedgwick, Rotch and others.

In 1910, Julius Sedgwick[1] published an article on creatinin and creatin metabolism in children. He expressed the opinion that as infants' food contains no creatinin, that creatin which occurs in the urine must be of endogenous origin or from the breaking down of certain body tissues.

In the same year, Rotch,[2] studying the relationship of the skeletal system to chronological age, noted an advancement or retardation of the osseous development in certain children. He decided what the normal anatomical development for chronological age was, and published his book, "The Roentgen Ray in Pediatrics."

Lately, Englebach and Shelton have demonstrated that anatomical development may be determined roentgenographically by noting the time and appearance, union, and size of various epiphyseal centers. Studies of the epiphyseal centers of certain joints will furnish precise objective information as to the skeletal development.

It would then appear rather lamentable if physicians, limiting their work to patients in the growing period, do not appreciate the relationship of osseous development to chronological age. A retardation of osseous development is found in hypothyroid children.

HYPOTHYROIDISM

The vagaries of hypothyroidism are so capricious that the pediatrician should roentgen ray certain epiphyseal centers of all patients as a matter of routine. If there is a marked retardation of the osseous development, thyroid medication is usually indicated.

There can be little doubt as to the value of the thyroid gland. Its therapeusis is rational and justified. It is easily administered by mouth. Its toxicity is easily established, and its rate of absorption may be accurately determined.

The administration of thyroid will assist nature in unfolding the destiny of the germinal protoplasm.

Since the future physical destiny of the child is the work of the pediatrician, it becomes imperative that he recognize, diagnose, and treat the subthyroid child before rehabilitation becomes too limited.

Fortunately, the diagnosis and treatment of hypothyroidism is easier and more satisfactory than perhaps any other endocrine deficiency.

The diagnosis is based on history, clinical findings, and laboratory data. The laboratory data alone are only confirmatory, and should not take precedence over clinical observations.

History.—Excellent endocrine history forms have been devised by Gordon,[3] Englebach, and others.

A careful history of inheritance is of great importance. The family history should unearth data pertaining to the stature, allergy, and obvious endocrinopathies of parents, grandparents, and other members of the immediate family.

The personal history of the child should begin with his birthweight. The normal weight for infants is considered between seven and eight pounds. Babies weighing nine pounds or more may be considered as possible thyropituitary potentialities, while babies weighing under six pounds may be possible subthyroid potentialities. Any deviation from the normal growth increment should be noted, especially in relation to any preceding acute illness, such as scarlet fever.

The age of dentition is also important. The lower incisors normally erupt at six months. Retardation is usually a result of a hypothyroid condition.

An allergic history of eczema, colic, and constipation is usually noted in hypothyroid infants; while colic and the insatiable desire for food are often the symptoms of a thyropituitary disorder.

Retarded development in walking and talking are also manifestations of a thyroid deficiency.

History of croup, spasmophilia, tetany, pylorospasm, pyloric stenosis and enlarged thymus must be considered as entities or symptoms of some possible hypothyroid condition, and not merely as coincidental.

In older children we note such factors as temperament, sluggish mentality, nondependability, inattentiveness, forgetfulness, and clumsiness. These characteristics later may become a matter of school record.

Clinical Findings.—On physical examination the general appearance of the subthyroid child may be overweight and underheight, or underweight and overheight, or underweight and underheight. The facial expression, while usually apathetic and dull, may be intelligent and alert.

The skin is usually dry and there may be small patches of eczema, icthyosis, or uticaria present.

The characteristic of the teeth may be pathonomanic of a thyroid disorder. The subthyroid child has soft, easily decaying teeth. The hypothyropituitary child usually shows a separation of the upper and lower incisors, and there may be a

complete absence of the upper lateral incisors. Most all hypothyroid or hypothyropituitary children have malocclusion which necessitate orthodential correction.

On examining the heart a split second heart sound may be audible. The pulse is usually slow, with an accompanying subnormal temperature.

The abdomen of the infant is usually protruding, and there may be sufficient weakness of the navel to cause an umbilical hernia. In older children of the hypothyropituitary type there is a deposition of fat in the abdomen and girdle regions.

The genitals of these children are usually infantile.

The extremities usually present padding of fat on the dorsum of the hands or feet. The fingers are usually short and stubby, or short and tapering. Most overweight hypothyroid or hypothyropituitary type children have flat feet.

The conformation of the patient is recorded by seven measurements: circumference of skull, chest, abdomen, and hips, the upper measurement, or distance from the superior portion of the symphysis pubis to the vertex of skull, and the lower measurement, or distance from the pubis to the sole of the foot, and the span, or distance from tip of one middle finger to the other, with arms fully extended.

Laboratory Data.—Roentgenograms should be made of the six joints of the extremities: the shoulder, elbow, hip, knee, hand, and foot.

At birth, a roentgenogram of the knee will show the distal epiphysis of the femur and the proximal epiphysis of the tibia.

At one year the following osseous centers should be visualized by roentgenogram in the wrist: the capitate, hamate, and distal epiphysis of the radius; in the shoulder the epiphyseal head of the humerus; in the hip the epiphyseal head of the femur, while the ankle should show the presence of the external cunieform and the distal epiphysis of the tibia.[4]

For sake of brevity, let us follow the development of the epiphyseal centers of the wrist. At three years the triangularis and epiphysis of the phalanges and metacarpal bones should appear. At four years the lunate should appear. At five the trapezium and scaphoid should make their appearance. At six years the trapezoid and distal epiphysis of the ulna, and at ten years the pisiform is present. At fourteen to sixteen years, there is the union of the epiphysis of the phalanges and the metacarpal bones.

As the pituitary balance must be considered in all cases of thyroid imbalance—since the pituitary hormone exerts a stimulating effect upon the thyroid gland—it is obviously quite necessary to x-ray the sella turcica in order to visualize the size of the pituitary body.

The pituitary function may also be estimated by blood and urine sugar tolerance tests.

Thyropituitary individuals usually present a flat blood sugar curve.

The evaluation of blood cholesterol appears to merit much consideration by such men as Bronstein, Hurxthal,[5] and others, who report high cholesterol values in hypothyroidism.

The basal metabolism is no doubt of great importance in children over eight or nine years of age. Young children do not coöperate satisfactorily to warrant this test.

An electrocardiogram, if taken, may show a flattening or inversion of the *T* waves, especially in Lead II. *P* waves are small or absent in myxedema.

* * *

The following two cases illustrate two boys who, although of the preadolescent age, made immediate improvement when thyroid was administered, and who still require (six years later) the continuation of thyroid to maintain a normal metabolism.

REPORT OF CASES

CASE 1. *Case of Hypothyroidism with Paradoxical Signs and Symptoms.*—W. P., male, age 12, came to my office on September 5, 1929. Chief complaint: Failure to gain in weight. In the past two years he had gained only four pounds. The child was adopted at the age of eighteen months, and nothing was known of his family history or his early life. Past illnesses included chicken-pox and whooping-cough. He had always been underweight. He had been forced to eat until he was six or seven years of age. His appetite for the past three years had been very good.

Examination revealed a tall, slender, hyperactive child, 59½ inches tall, weighing 82¼ pounds. Pulse, 74; temperature, 98. Skin clear and well tanned. Tonsils removed at six years of age. Teeth in good repair, but showed lack of dentine, and the six-year molars had been filled with gold inlays. No pathology was noted in heart, lungs, or abdomen. Genitals and extremities were normal. He had been immunized against diphtheria and smallpox. Blood Wassermann was negative. Basal metabolic rate, minus 23. Blood sugar determination was normal. Patient was given one-half grain of thyroid daily and immediately began to gain in weight. On September 24, eighteen days after the first visit, he had gained 3¼ pounds; temperature, 98.4. On December 23, three and one-half months later, he had made a total gain of nine pounds. His height at that time was 60¾ inches, or a growth of 1¼ inches in three and one-half months. Temperature, 97.8; pulse, 80. Thyroid was then increased to three-fourths grain daily, and on July 22, 1930, he weighed 102 pounds and was 63 inches tall. In ten months this patient gained 20 pounds and grew 3½ inches. Subsequent basal metabolisms have shown the necessity of a maintenance dose of one-half grain of thyroid daily.

* * *

CASE 2. *Thyropituitary Deficiency.*—P. G., male, age 13 years 4 months.

Diagnosis: Hypothyro-pituitary. Came to the office in January, 1929.

Chief complaints: Obesity, tires easily, difficulty in school.

Family history: Father, living and well, age 49; height, 5 feet 3 inches; weight, 145 pounds. Mother, living and fairly well, age 39; height, 5 feet 6 inches; weight, 123 pounds. Had operation for exophthalmic goiter four years previous.

Past history: Childhood illnesses, measles, pertussis, and influenza.

Personal history and present illness: Birth weight, 7 pounds 12 ounces; first tooth at five and one-half months. Walked at one year, talked at one year. Not overweight as a baby. Active child. Has some difficulty in school. In other respects bright, but has to study quite hard. Has not had to repeat any grades. Has been overweight since a small child, and for some years has failed to make a normal growth gain. No digestive upsets and no allergic manifestations.

Present examination: Weight, 130½ pounds; height, 59 inches. Upper measure, 28¾ inches; lower measure, 30¾ inches; span, 61 inches. General appearance is that of an obese boy with slight Mongolian appearance. Fat distribution is general, especially marked in girdle and mammary regions. Hair, pubic hair just starting. Ears, eyes, nose, negative. Teeth, very pronounced malocclusion. Abdomen, negative. Extremities markedly flat-footed. Genitalia: penis small, scrotum and testes normal. Blood pressure, 98/60. Basal metabolic rate, minus 23.

This boy was given thyroid, grain one-half; whole pituitary, grains two, salol coated capsules twice daily.

In eight months he grew two inches and lost nine pounds. In one year he made a growth of three and one-half inches in height, and weight remained unchanged. He had become very active and never tired, in contrast to his former lethargic state. Genitalia now normal size. Basal metabolism rate was plus seven.

This boy at first required a combination of thyroid and pituitary treatment, but later thyroid, grain one-half daily, was sufficient to maintain a normal basal metabolic rate.

MEDICATION

A few years ago the impression was that if thyroid dysfunction existed and thyroid were given, beneficial results would be attained *at once*. If thyroid was not necessary and it was given, we should have symptoms of overdosage as loss of weight, etc.

It has been my observation, and the observations of others, that in many instances of underweight hypothyroid children there may be an initial loss of weight, and some elevation of temperature and pulse due to the toxins, produced by the catabolism of myxedematous tissue.

In all cases of hypothyroidism it is recommended that small doses of thyroid be administered, and gradually increased to the maintenance dosage. All patients receiving thyroid medication should have periodic clinical examinations, together with roentgenograms and metabolic rechecks in order that the dose of thyroid may be increased or decreased.

SUMMARY

1. The most important problem in treatment of hypothyroidism in childhood is early recognition.

2. The classical signs and symptoms of hypothyroidism may not always be present.

3. The longer treatment is delayed, the less opportunity there will be of obtaining the maximum therapeutic results.

4. Laboratory aids other than basal metabolic rate include appraisal of blood cholesterol, blood sugar tolerance, and creatin excretion in the urine, together with probably the most valuable of all—the roentgen study of the anatomical development.

1515 State Street.

REFERENCES

1. Sedgwick, Julius P.: Creatinin and Creatin Metabolism in Children, J. A. M. A., 55:1178-1180 (Oct. 1), 1910.

2. Rotch, Thomas Morgan: The Development of the Bones in Early Life. Transactions of the Association of American Physicians, 1909.

3. Gordon, Murray B.: Endocrine Studies in Infants and Children, Jour. Pediatrics, pp. 659-679 (Nov.), 1934.

4. Shelton, E. Kost: Roentgenographic Studies in Normal Osseous Development, J. A. M. A., 196:759-766 (March 7), 1931.

5. Hurxthal, L. M.: Blood Cholesterol and Thyroid Disease, Archives of Int. Medicine, 103:762-781 (May), 1934.

DISCUSSION

DONALD K. WOODS, M. D. (2545 Fourth Avenue, San Diego).—This paper on the subthyroid child brings to our attention many facts which are very important, particularly to pediatricians and general practitioners. I think the author's emphasis of the fact that endocrine disturbances are a matter for serious consideration by anyone caring for children, rather than only by specialists in endocrinology, is very timely. Growth and development are not synonymous, as has been clearly indicated. It is highly important that we at all times know the bone age of a developing child, particularly if there is any question about its normal progress. This method of checking a potential thyroid deficiency is rather accurate and within the reach of any one who is handling children. I believe that Doctor Lamb's emphasis of the need of early treatment of subthyroid children is most essential. Too many cases which have been under observation for years are given consideration from an endocrine standpoint only when the symptoms become evident to the parents. I believe we must all keep more definitely before us the fact that many thin and undernourished children may be suffering from a thyroid deficiency. I am sure that very good observers pay little attention to thyroid deficiencies, except in overweight children, many of whom are of the thyropituitary deficiency type.

I believe that the basal metabolism test can be given to very young children if sufficient time and patience are devoted to the making of the test and the reading of the findings. Many children at seven or eight years of age submit very peacefully to the checking of the basal metabolic rate, and in this office we have tested some satisfactorily who are less than six years old.

As suggested in this paper, I believe it is very wise to start with small doses of thyroid, one-tenth to one-quarter grain, gradually increasing the dosage up to the point of tolerance. In addition to watching for obvious symptoms of thyroid overdosage, repeating of basal metabolic tests and rechecking with x-ray of the wrist bones, give us a fairly accurate method of controlling our treatment.

There is no doubt in my mind that many children with a low basal metabolic rate, who are considerably overweight, may be treated very satisfactorily by the use of restricted diets and increased exercise, without the use of thyroid. At least this method of treatment will definitely influence their weight. However, I believe that all of these cases should have careful checking of the bone age, as a mere loss of weight does not indicate that the underlying thyroid deficiency has been remedied.

I believe further emphasis should be placed on the fact that late or irregular dentition or extensive caries of teeth in children should be looked upon as a very possible evidence of thyroid disturbance. I feel sure that the average physician, as well as the dentist, rarely takes this into consideration. This brings us again to the occasionally emphasized fact that there should be a much closer relation between the dentist and those caring for children.

I thoroughly believe, with the author of this paper, that hypothyroidism is far more widespread in our pediatric practice than most of us appreciate. I think, therefore, that a routine check for this possibility is just as important as routine Mantoux or Schick tests.

❦

HELEN PRYOR, M. D. (659 Middlefield Road, Palo Alto). I was very much interested in Doctor Lamb's description of subthyroid children, because I believe that borderline hypothyroids constitute a neglected group.

In Doctor Lucas' private practice we have now done 2,300 basal metabolism tests on 889 children and feel that we can get reliable tests on children as young as five to six years. (We never accept a first basal, but always recheck.)

Approximately 17 per cent of the total number of children we classified hypothyroid. We found a significant age variation (the younger the child the higher the basal rate), so that any minus rate in a very young child is important.

We found also a body-build trend, with slender children averaging higher rates than broad ones. (This is true, age by age, and also regardless of age.)

Among 167 slender-built children there were both high rates and low rates, but the slender-built group as a group actually averaged plus 12.8 per cent.

The exact converse was true for ninety-four broad-built children, who actually averaged minus 15.2 per cent.

At the recent meeting of the American Pediatric Society in Cleveland, Dr. Fritz Talbot reported a similar finding when studying different weight groups. His children from weights 22 to 29 kilos averaged plus 5 per cent; 29 to 55 kilos averaged 0; 55 kilos and up averaged minus 10 per cent.

(Weight, of course, parallels body build, when height is held constant.)

Among our slender-built children who should have had high basals were a number who did have low basals (and these kept the average rate for the slender-built from going as high as it would have gone otherwise). I sorted out this group of little slender fellows (who should have had high rates, but who deviated in the unexpected direction), to look for any other factor which they might share in common, and found that 82 per cent of them were allergic. A number of this group showed improvement in their allergic symptoms on small doses of thyroid.

❦

HENRY E. STAFFORD, M. D. (242 Moss Avenue, Oakland).—Doctor Lamb's paper on the subthyroid child points the way to a better understanding of another borderline problem of childhood dealing with a midpoint between health and disease. As such, it is just as much a part of preventive medicine as the specific immunizing procedures in communicable diseases. He has emphasized the falseness of limiting our diagnosis of hypothyroidism to the classical picture of an obese, sluggish, and developmentally retarded individual. A poor state of nutrition often associated with mental alertness is commonly found in the subthyroid child. Such an individual gains weight with surprising rapidity when given adequate doses of thyroid.

Even though we assume that a certain number of children with insufficient thyroid secretion gain their glandular balance at the time of puberty (as has been suggested), there seems to be no logical reason for allowing an individual to pass through the most important formative years at a level below his or her optimum efficiency. Determination of bone age should be as much a part of a complete physical examination as a blood count or urine examination. This routine procedure, supplemented by adequate glandular therapy, has given us the solution of many problems which, previous to the last year, have of necessity been classed in our group of failure cases.

MENSTRUAL HYPOGLYCEMIA AND FUNCTIONAL DYSMENORRHEA: THEIR RELATIONSHIP*

By MILO K. TEDSTROM, M.D.
AND
LLEWELLYN E. WILSON, M.D.
Santa Ana

DISCUSSION *by Harry J. Deuel, Jr., Ph.D., Los Angeles; Margaret Schulze, M. D., San Francisco; Emil Bogen, M. D., Olive View.*

IN a previous paper [1] one of us suggested that functional dysmenorrhea, nervousness, weakness, and similar symptoms accompanying menstruation were in some cases associated with hypoglycemia. High carbohydrate feedings tended to relieve these symptoms. This report will give a more complete résumé of our blood-sugar studies during menstruation and the results of extra carbohydrate feedings for relief of functional dysmenorrhea.

HOW NORMAL BLOOD-SUGAR LEVEL IS MAINTAINED

Before discussing these blood-sugar studies, we shall briefly discuss the factors involved in maintaining a normal blood-sugar level.

Hepatic glycogen is generally recognized as the chief source of blood sugar. When food is being absorbed, the blood sugar is temporarily increased. The internal secretions of the ovaries, testes, and parathyroids act with insulin to reduce the blood sugar, while the secretions of the pituitary, thyroid, and adrenals tend to raise blood sugar. The interaction of these hormones may be controlled through a nervous center in the pons, according to MacLeod.[2]

Among the hormones elaborated by the anterior pituitary is the so-called diabetogenic hormone, which is antagonistic to insulin. This hormone apparently, according to experimental work of H. Lucke [3] and his associates, passes into the cerebrospinal fluid and then stimulates the sugar center in the medulla. This center in turn, via the sympathetic nervous system, stimulates the suprarenal glands. This results in liberation of epinephrin, which acts on the liver to cause a release of hepatic glycogen.

Barnes [4] and his associates have found that the injection of estrogenic substance decreases the glycosuria and hyperglycemia of experimental animals, and attributed this to a decrease in the secretion of the anterior pituitary gland. Elek [5] has reported that folliculin decreases the sensitivity to adrenalin and increases insulin hypoglycemia. He has noted opposite effects with prolan; that is, an increase in sensitivity to adrenalin, but no constant effect on insulin. Böhm,[6] however, has shown that prolan decreases insulin hypoglycemia.

Raab [7] and Elek [5] have said that the ovarian hormone decreases alimentary hyperglycemia. Raab [7] has reported an increase in the hepatic glycogen resulting from an increased glycogenesis due to the influence of this hormone, but Gulick [8] and his associates have observed, experimentally, in ovariectomized rats that administration of theelin results in a decrease in liver glycogen. Burger,[9] in 1930, described the so-called insulin hyperglycemia, which he interpreted as proving the liver contained glycogen. Kaufman and Mühlbock [10] found a marked decrease of this initial insulin hyperglycemia during menstruation, which they attributed to a decreased glycogen content of the liver.

A search of the literature reveals only occasional studies of the carbohydrate metabolism during the menstrual cycle, and the results are conflicting. Benthin [11] and Kahler,[20] the first to report studies of the blood sugar during menstruation, found only a slight increase of the fasting blood sugar and no rise was observed one hour after administration of 100 grams of dextrose. Okey and Robb[12] observed during menstruation an increased tolerance for glucose which they attributed to an alter-

* From the Orange County General Hospital, Orange, and St. Joseph's Hospital, Orange.

Read before the Obstetrics and Gynecology Section of the California Medical Association at the sixty-fourth annual session, Yosemite National Park, May 13-16, 1935.

CHART 1.—*Sugar Tolerance Curves*

GROUP A. No, or Slight Dysmenorrhea. No Treatment.

Case No.		Fasting	½ hr.	1 hr.	2 hrs.	3 hrs.	4 hrs.	5 hrs.	6 hrs.	Menstrual Symptoms
1	Menstrual	.095	.163	.100	.114	.103	.108	.095	.....	Menorrhagia
	Intermenstrual	.129	.203	.132	.095	.080	.095	.095	.....	
2	Menstrual	.083	.111	.111	.074	.072	.058	.050	.074	Occasional slight pain.
	Intermenstrual	.086	.125	.069	.080	.069	.105	.102	.084	
3	Menstrual	.085	.157	.105	.100	.071	.062	.068	.086	Occasional slight pain.
	Intermenstrual	.090	.137	.149	.052	.057	.091	.109	.108	
4	Menstrual	.085	.111	.045	.066	.068	.068	.060	.....	Occasional slight pain.
	Intermenstrual	.084	.149	.133	.050	.074	.069	.073	.086	
5	Menstrual	.080	.146	.....	.100	.....	.084	.078	.080	No pain Reg. periods
	Intermenstrual	.100	.146	.....	.153	.129	.125	.091	.074	
6	Menstrual	.091	.180	.220	.118	.095	.069	.050	.....	Menorrhagia
	Intermenstrual	.085	.175	.110	.064	.080	.089	.089	.....	
7	Menstrual	.095	.163	.100	.114	.108	.118	.095	.....	No symptoms
	Intermenstrual	.129	.200	.172	.103	.072	.095	.095	.....	
8	Menstrual	.100	.153	.190	.160	.131	.100	.....	.....	No symptoms
	Intermenstrual	.110	.145	.125	.110	.110	.110	.110	.105	
Menstrual average		.089	.148	.111	.105	.092	.083	.071	.076	
Intermenstrual average		.101	.160	.127	.089	.083	.097	.098	.091	

ation in pancreatic response. Frey,[13] on the other hand, found a decreased tolerance. Hoffman,[14] in 1914, studied the intermenstrual and menstrual response to galactose and levulose feeding and reported an increased tolerance during the menses. Franke[15] also found an increased tolerance to galactose, but Rowe and McGuiness[16] reported a decreased tolerance. Hoffman[14] observed an increased tolerance for fructose, and Heilig[17] a decreased tolerance for saccharose.

Pucher[18] and his associates have observed the fasting blood sugar of two women at weekly intervals for one year. Both showed a sharp premenstrual rise to well above the menstrual level, followed by a fall to the lowest sugar level during the third week after menstruation. They concluded that the cyclic variation in blood-sugar level must still be regarded as uncertain. Okey and Robb,[12] who have also made studies of the fasting blood-sugar, concluded that it is impossible to state positively that there is a uniform and constant variation in the fasting level of blood sugar at any one phase of the monthly cycle in women. However, they found the average menstrual value was higher than the average intermenstrual value. They also found higher or lower sugar levels during menstruation than at any other time during the cycle. Heilig[17] and Bloch and Bergel[19] also observed that the blood sugar decreased as the flow lessened, and was lowest in the interval between periods. Kahler,[20] using the Bang method of blood sugar determination, found similar results. In seven out of a series of ten cases, Kaufman and Mühlbock[10] found a menstrual increase in the fasting blood sugar. It has been very commonly observed that diabetic women usually have a higher blood-sugar level and glycosuria during menstruation than at other times during the monthly cycle. However, in view of the conflicting sugar studies, it would seem probable that some female diabetics would experience a lowering of the blood-sugar level at menstruation. That this does occur is shown by our observation of a patient requiring daily injections of insulin, who has to reduce her dose of insulin during menstruation because of reactions.

Glucose tolerance studies have been made by us on thirty-eight women about midway between and on the first or second day of menstruation. The test-meal consisted of 100 grams of glucose. In this series there was an increase in the glucose tolerance during menstruation in the majority of the patients studied. The fasting blood sugar was lower during menstruation than during the midmenstrual period in about 80 per cent of the cases although the difference was frequently very slight.

AUTHORS' GROUPING OF CASES

Our cases have been separated into three groups. Group "A" is composed of those patients having no, or very slight, dysmenorrhea; Group "B" is composed of those patients having menstrual distress and relieved by extra carbohydrate feedings; Group "C" is composed of those patients with dysmenorrhea, but not relieved with oral carbohydrate feedings or intravenous glucose. The average menstrual fasting blood sugar is lower than the average intermenstrual value in Groups "A" and "B," but higher in Group "C." The average menstrual and intermenstrual tolerance curves of Groups "A" and "C" are very similar and in striking contrast to those of Group "B," the average menstrual and intermenstrual curve of Group "B" being much lower.

MENSTRUAL PAINS

In every case in which the fasting blood sugar was low, that is, below 80 milligrams per 100 cubic centimeters, the individual had either menstrual pains of varying severity or complained of marked nervousness, irritability, weakness, extreme hunger, or excessive desire for sweets two or three days preceding onset of flow. The women studied by Okey and Robb[12] often complained of extreme hunger at this time. Every patient

CHART 2.—*Sugar Tolerance Curves*

GROUP B. Dysmenorrhea or Weakness. Complete or Partial Relief.

Case No.		Fasting	½ hr.	1 hr.	2 hrs.	3 hrs.	4 hrs.	5 hrs.	6 hrs.	Menstrual Symptoms	Result of Carbohydrate Feedings
9	Menstrual	.076	.....	.083	.093	.084	.064	.080	.071	Severe pain. Nervous marked.	Relief with intravenous glucose temporary. Slight relief.
	Intermenstrual	.086	.181	.190	.105	.181	.....	.151	.118		
10	Menstrual	.090	.180	.220	.118	.095	.064	.050	.....	Weakness and metrorrhagia marked.	Relief of weakness.
	Intermenstrual	.084	.200	.110	.054	.080	.089	.089	.....		
11	Menstrual	.042	.074	.154	.....	.112	.117	.105	.073	Severe pain. Very nervous; has to go to bed.	Complete relief. Mid-menstrual pain once relieved with oral CaH.
	Intermenstrual	.090	.....	.105	.....	.090	.083	.084	.....		
12	Menstrual	.071	.076	.066	.066	.076	.076	.083	.083	Considerable pain.	Complete relief.
	Intermenstrual	.093	.105	.066	.076	.073	.086	.074	.086		
13	Menstrual	.080	.083	.064	.090	.071	.075	.085	.090	Severe pain. Has to go to bed.	Complete relief.
	Intermenstrual	.076	.066	.070	.080	.050	.076	.050	.066		
14	Menstrual	.087	.085	.083	.081	.069	.093	.090	.071	Severe pain at times and has to go to bed.	Complete relief.
	Intermenstrual	.086	.077	.073	.078	.083	.071	.050	.086		
15	Menstrual	.081	.142	.125	.085	.090	.066	.081	.086	Severe pain. Has to go to bed.	Complete relief.
	Intermenstrual	.086	.154	.133	.114	.100	.070	.095	.100		
16	Menstrual	.090	.130	.060	.072	.083	.095	.091	.095	Severe cramps.	Relief complete, also intravenous glucose with relief.
	Intermenstrual	.095	.100	.091	.091	.061	.078	.091	.....		
17	Menstrual	.063	.180	.100	.071	.062	.070	.064	.....	Pain and nervous.	Complete relief.
	Intermenstrual	.099	.150	.120	.100	.087	.071	.088	.....		
18	Menstrual	.060	.080	.110	.094	.072	.061	.060	.077	Pain, nervous, weak, petitmal epilepsy.	Complete relief.
	Intermenstrual	.084	.120	.154	.128	.105	.073	.088	.....		
19	Menstrual	.062	.084	.090	.088	.064	.056	.080	.078	Severe pain. Weakness, has to have morphine.	Complete relief.
	Intermenstrual	.080	.112	.118	.106	.095	.078	.084	.082		
20	Menstrual	.111	.200	.166	.117	.121	.087	.087	.109	Irregular menstruation, mild pain before, severe since poliomyelitis.	Complete relief.
	Intermenstrual	.095	.129	.091	.095	.069	.075	.091	.....		
21	Menstrual	.085	.091	.091	.080	.080	.045	.066	.....	Severe pain.	Complete relief.
	Intermenstrual	.104	.217	.227	.147	.111	.111	.085	.....		
22	Menstrual	.083	.111	.073	.088	.069	.080	.079	.078	Severe cramps with some periods.	Relieved with intravenous glucose. No oral feedings.
	Intermenstrual	.087	.133	.111	.087	.064	.077	.077	.....		
23	Menstrual	.105	.169	.195	.154	.080	.088	.088	.....	Always some cramps, more severe since poliomyelitis.	Considerable relief.
	Intermenstrual	.117	.....	.120	.133	.087	.105	.117	.105		
24	Menstrual	.118	.124	.066	.062	.087	.087	.100	.108	Severe pain.	Complete relief, also intravenous glucose with relief.
	Intermenstrual	.133	.105	.077	.080	.100	.111	.125	.123		
25	Menstrual	.102	.114	.095	.117	.102	.088	.093	.....	Severe pain. Worse since poliomyelitis.	Glucose intravenously with relief. Partial relief with oral feedings.
	Intermenstrual	.102	.130	.123	.121	.125	.100	.090	.093		
26	Menstrual	.064	.085	.090	.074	.065	.060	.070	.074	Severe pain.	Complete relief.
	Intermenstrual	.090	.120	.180	.135	.124	.100	.084	.090		
27	Menstrual	.088	.130	.071	.049	.047	.035	.....	.....	Severe menstrual pain.	Considerable relief.
	Intermenstrual	.088	.109	.114	.121	.133	.148	.104	.....		
28	Menstrual	.070	.090	.100	.074	.070	.063	.....	.....	Headaches, weakness and nervousness.	Complete relief.
	Intermenstrual	.103	.131	.109	.108	.086	.066	.....	.....		
29	Menstrual	.080	.125	.086	.078	.066	.067	.074	.083	Severe pain occasionally.	Complete relief.
	Intermenstrual	.090	.166	.105	.125	.090	.100	.119	.106		
30	Menstrual	.103	.111	.075	.100	.083	.102	.117	.105	Severe pain. Has to go to bed.	Complete relief.
	Intermenstrual	.105	.154	.071	.112	.117	.080	.085	.086		
31	Menstrual	.061	.086	.068	.055	.076	.076	.083	.083	Considerable pain.	Complete relief.
	Intermenstrual	.069	.080	.062	.076	.073	.086	.074	.086		
32	Menstrual	.087	.083	.096	.080	.087	.066	.071	.074	Considerable pain.	Complete relief.
	Intermenstrual	.096	.089	.104	.092	.067	.079	.....	.078		
33	Menstrual	.086	.095	.069	.....	.066	.066	.066	.050	Considerable pain.	Complete relief.
	Intermenstrual	.062	.095	.100	.076	.100	.080	.100	.100		
Menstrual average		.082	.106	.076	.084	.072	.076	.080	.078		
Intermenstrual average		.093	.126	.110	.109	.106	.092	.095	.093		

CHART 3.—*Sugar Tolerance Curves*

GROUP C. Dysmenorrhea or Weakness. No Relief.

Case No.		Fasting	½ hr.	1 hr.	2 hrs.	3 hrs.	4 hrs.	5 hrs.	6 hrs.	Menstrual Symptoms	Result of Carbohydrate Feedings
34	Menstrual	.118	.118	.133	.091	.123	.133	.118	.....	Moderate pain	No relief
	Intermenstrual	.078	.182	.230	.123	.090	.080	.080	.078		
35	Menstrual	.118	.220	.154	.116	.072	.100	.128	.128	Severe pain	No relief with intravenous glucose or oral feedings
	Intermenstrual	.107	.133	.085	.085	.070	.084	.105	.106		
36	Menstrual	.091	.143	.154	.115	.085	.060	.090	.090	Severe pain	No relief
	Intermenstrual	.100	.166	.111	.087	.080	.091	.....	.....		
37	Menstrual	.075	.106	.181	.083	.090	.060	.066	.073	Severe pain Nervousness	No relief
	Intermenstrual	.109	.166	.200	.166	.119	.115	.114	.102		
38	Menstrual	.088	.160	.174	.125	.102	.090	.092	.096	Severe pain	No relief
	Intermenstrual	.094	.180	.192	.130	.106	.094	.090	.093		
Menstrual average		.098	.150	.159	.105	.094	.088	.100	.097		
Intermenstrual average		.083	.165	.163	.118	.093	.092	.097	.095		

with a low fasting blood sugar, except No. 37, obtained at least partial relief of symptoms by measures designed to elevate the blood sugar. An explanation of this apparent association of hypoglycemia and functional dysmenorrhea is found when we review the work of several investigators.

Novak [21] has said that the character of the pain in primary dysmenorrhea suggests as the immediate cause a painful exaggerated contractility of the uterine musculature. He and Reynolds [22,23] have shown that folliculin produces uterine contractions while progestin [21,24] inhibits these contractions in both the pregravid and gravid states. Kelly and Florence [25] and Papanicolaou [26] have also stated that the hormone of the corpus luteum inhibits the estrogenic hormone. Leonard, Meyer, and Hisaw [27] have demonstrated that injections of theelin inhibit pituitary function with consequent atrophy and sclerosis of the ovaries. Frank [28] has shown that the estrin content of the blood is greatest just before corpus luteum breakdown and onset of menstruation. Thus the inhibitory effect of estrin on the anterior pituitary gland probably results in the degeneration of the corpus luteum. In the typical case of functional dysmenorrhea, the pain begins a day or two before the onset of the flow, which is the time the corpus luteum begins to degenerate with resultant decrease in the secretion of progestin. This decrease in corpus luteum secretion results in onset of uterine contractions. Knauss [29] has shown that this is the period of maximum uterine contractility in menstruating women, and the estrin content of the blood is also greatest at this time. Meyer and his associates [30] and Moore [31] have shown that an excess of folliculin inhibits the gonadotropic function of the anterior pituitary gland, which in turn decreases folliculin secretion by the ovaries. This probably accounts for the onset of bleeding and relief of pain after one or two days. The above sequence of events presumably occurs in all women, yet the heightened contractility of the uterus at this period is not always productive of pain. Okey and Robb [12] say that 60 to 75 per cent of all civilized women have more or less menstrual pain and incapacitation for work. Certain women, of course, are more sensitive to pain than others, and psychogenic, constitutional, or other factors undoubtedly predispose to more discomfort.

Thus it seems quite probable that an excess of estrin, together with a decreased amount of progestin, may produce the so-called "premenstrual tension" of Frank [28] and the pain of functional dysmenorrhea. An excess of estrin can apparently also result in the hypoglycemia we have observed in some cases of functional dysmenorrhea, as Nelson and Overholser [32] have stated that injections of theelin reduce the hyperglycemia and glycosuria of experimental diabetes. They attributed this to an inhibition of the diabetogenic hormone of the anterior pituitary gland.

This balance between secretion of progestin and theelin and the resultant effect on the anterior hypophysis apparently explains the conflicting reports as to blood-sugar studies during menstruation. It seems quite probable that the normal endocrine balance would result in an increased blood sugar just before and during menstruation. Frey [13] and Heilig [17] have also shown that uterine contracture tends to elevate the blood sugar, and Bloch and Bergel [19] have stated that there is an increased thyroid activity at this time which would tend to increase the blood sugar.

The treatment of our patients with functional dysmenorrhea associated with a low fasting blood sugar or a low sugar curve during menstruation, consisted of extra carbohydrate feedings beginning about three days before onset of menses and continuing through the first three days of the period. It was observed that better results were obtained if the extra feedings were taken at two- or three-hour intervals during the day rather than larger amounts at longer intervals. Orange juice was the usual form of carbohydrate taken. Karo syrup, glucose, cane sugar, etc., all worked equally well. However, one case was observed to get no relief with honey, but did with Karo syrup or orange juice. These extra carbohydrate feedings have relieved the premenstrual tension as nervousness, excitability, etc., and the menstrual pain in about 80 per cent of the cases in which they have been tried.

Eight patients have been given 25 cubic centimeters of 50 per cent glucose intravenously with immediate relief of menstrual pain. This relief is very dramatic, occurring before completion of the injection. If the pain returns, it is usually slight and easily controlled by extra carbohydrate feedings. On two occasions a second injection of glucose was given about an hour after the initial injection because of return of pain. This second injection resulted in complete relief in one patient, but not in the other.

Since relief of the menstrual discomfort was also obtained by several patients with a normal blood sugar, it seems wise to try this form of therapy on every case of functional dysmenorrhea. Even though these patients do not get complete relief of their pain, they seem to feel much better with the feedings than without them. When relief was obtained they were advised to take carbohydrate feedings throughout the remainder of the period. There was slight return of the menstrual pain in a few instances. Two patients who were having cramps and slight flow midway between periods were relieved. One was relieved by oral carbohydrate feedings and the other by an intravenous injection of glucose. The blood sugar of the latter was 60 milligrams per cent before glucose was injected.

REPORT OF CASES

Case 1 (11).—Female, age thirty. Menstrual history: Onset of menses was at the age of fifteen. Menstruation is regular, occurring every twenty-eight days. Duration is six days. A few hours before onset of flow she has very severe pain. This pain continues through the first day of the flow, when it decreases. On the second day she has considerable lumbosacral backache. During menses she feels very nervous, weak, shaky, irritable, and chilly. Extra carbohydrate feedings have given complete relief.

Case 2 (14).—Female, age twenty-six. Menstrual history: Onset of menses was at the age of eleven. Menstruation is regular, occurring every twenty-eight days. Duration is four to five days. During the past two years she has had dysmenorrhea of such severity that she usually has to spend one day in bed. Flow is normal. Extra carbohydrate feedings have been used, with complete relief of pain.

Case 3 (16).—Female, age twenty-two. Menstrual history: The onset of menses was at the age of fifteen. Menstruation is regular, occurring every twenty-six to thirty days. Duration is five days. She has severe abdominal cramps and considerable pain in thighs throughout period. These pains are most marked on fifth day of flow. During one period she was given 50 cubic centimeters of 50 per cent glucose intravenously, with immediate relief of pain. The next morning she had some return of cramps, but they were controlled with increased carbohydrate feedings. Extra carbohydrate feedings have resulted in complete relief of menstrual discomfort.

Case 4 (21).—Female, age thirty-four. Menstrual history: Onset of menses was at the age of thirteen. Menstruation is regular, occurring every twenty-eight days. Duration is three to four days. There is considerable dysmenorrhea and pelvic distress. Extra carbohydrate feedings have given complete relief.

CONCLUSIONS

1. There does not seem to be any uniform variation in the fasting blood sugar at menstruation as compared with the mid-menstrual blood sugar. However, about 80 per cent of our series showed a lower blood sugar during menstruation. There is usually an increased tolerance for glucose during menstruation.

2. Patients having functional dysmenorrhea associated with a low fasting blood sugar at menstruation can be frequently relieved with extra carbohydrate feedings. Intravenous glucose relieves the menstrual pain in these patients at once. Occasionally a second injection of glucose is necessary. If a patient with functional dysmenorrhea has a normal or elevated fasting blood sugar, the extra carbohydrate feedings should be tried, as some of these patients will obtain relief.

218 South Main Street.

REFERENCES

1. Tedstrom, M. K.: Hypoglycemia and Hyperinsulinism, Annals of Int. Med., 7:1013-1025 (Feb.), 1934.

2. MacLeod, J. J. R.: Control of Carbohydrate Metabolism (Linacre Lecture), Lancet, 1:1079-1086 (May 21), 1932.

3. Lucke, H., Heydemann, E. R., and Duensing, F.: Observations of the Mechanism of the Contra-Insular Hormone of the Anterior Pituitary Body: (*a*) I. Anterior Pituitary Body, Thyroid and Carbohydrate Metabolism, Ztschr. f. d. ges. Exper. Med., 91:106, 1933; (*b*) II. Anterior Pituitary Body, Adrenalin Sufficiency and Carbohydrate Metabolism, *ibid.*, 91:483, 1933; (*c*) III. Anterior Pituitary Body, Adrenal Denervation and Carbohydrate Metabolism, *ibid.*, 91:492, 1933, and H. Lucke, and H. Hahndel: Observations on the Mechanism of the Contra-Insular Hormone of the Anterior Pituitary Gland; VI. The Possibility of a Biological Proof of the Contra-Insular Hormone in Spinal Fluid, Ztschr. f. d. ges. Exper. Med., 91:704, 1933, quoted by Wilder, R. M., and Wilbur, D. L., Archives of Int. Med., 55:304 (Feb.), 1935.

4. Barnes, B. O., Regan, J. F., and Nelson, W. O.: Improvement in Experimental Diabetes Following the Administration of Amniotin, J. A. M. A., 101:926-927 (Sept. 16), 1933.

5. Elek, L.: The Influence of Hormones on Blood Sugar Regulation, Ztschr. f. d. ges. Exper. Med., 85:227-234 (Nov. 8), 1932.

6. Böhm, F.: Effect of Anterior Pituitary Preparation (Prolan) on Content and Regulation of Blood Sugar, Ztschr. f. d. ges. Exper. Med., 84:689-690 (Jan. 7), 1932.

7. Raab, E.: The Effect of the Ovarian Hormone on Carbohydrate Metabolism, Arch. f. Gynak, 144:284-285, 1931. Quoted by Bloch, J., and Bergel, A., Wien. Arch. f. Inn. Med., 24:29-52 (Aug. 15), 1933.

8. Gulick, M., Samuels, L. J., and Deuel, H. J., Jr.: Sexual Variation in Carbohydrate Metabolism, Effect of Ovariectomy and Theelin Administration on Glycogen Content of Rats, Jour. of Biol. Chem., 105:29-34 (April), 1934.

9. Burger, M.: The Clinical Significance of the Initial Insulin Hyperglycemia, Klin. Wchnschr., 3:104-106 (Jan.), 1930.

10. Kaufman, C., and Mühlbock, P. O.: Liver Glycogen and the Menstrual Cycle, Klin. Wchnschr., 3:1170-1171 (June), 1930.

11. Benthin, W.: Blood Sugar Content During Menstruation in Normal and in Psychoneurotic Patients, Ztschr. f. Geb. u. Gyn., 71:532-543, 1912. Quoted by Bloch, J., and Bergel, A.: Wien, Arch. f. Inn. Med., 24:29-52 (Aug. 15), 1933.

12. Okey, R., and Robb, E. I.: Studies of the Metabolism of Women, I. Variations in Fasting Blood Sugar and in Sugar Tolerance in Relation to the Menstrual Cycle, Jour. of Biol. Chem., 65:165-168 (Aug.), 1925.

13. Frey, E.: Studies on Menstruation, I. Sugar Metabolism, Klin. Wchnschr., 3:1319-1320 (July 18), 1924.

14. Hoffman, E.: The Galactose Tolerance in the Normal and During the Menstruation, Ztschr. f. Exper. Path. u. Ther., 16:337-364, 1914. Quoted by Bloch, J., and Bergel, A.: Wien. Arch. f. Inn. Med., 24:29-52 (Aug. 15), 1933.

15. Franke: Ztschr. f. Klin. Med., 84:120, 1917. Quoted by Bloch, J., and Bergel, A.: Wien. Arch. f. Inn. Med., 24:29-52 (Aug. 15), 1933.

16. Rowe, A. W., and McGuiness, M.: The Metabolism of Galactose, IV. The Effect on the Tolerance of the Level of the Ovarian Activity, Amer. Jour. of Obs. and Gyn., 16:687-698 (Nov.), 1928.

17. Heilig, R.: Sugar Metabolism During Menstruation, Klin. Wchnschr., 3:576-577 (April 1), 1924.

18. Pucher, G. W., Griffith, F. R., Jr., Brownell, K. A.: Studies in Human Physiology—Variations in Blood Chemistry Over Long Periods of Time, Including Those Characteristic of Menstruation, The Jour. of Nutrition, 7:169-193 (Feb. 10), 1934.

19. Bloch, J., and Bergel, A.: The Ovarian Cycle and Carbohydrate Metabolism, Wien. Arch. f. Inn. Med., 24:29-52 (Aug. 15), 1933.

20. Kahler, H.: Effect of Menstruation on Blood Sugar Content, Wien. Klin. Wchnschr., 27:417-419, 1914. Quoted by Bloch, J., and Bergel, A.: Wien. Arch. f. Inn. Med., 24:29-52 (Aug. 15), 1933.

21. Novak, Emil: On Certain Endocrine Factors in Menstruation and Menstrual Disorders, with Special Reference to Problems of Menstrual Bleeding and Menstrual Pain, Amer. J. of Obs. and Gyn., 24:319-329 (Sept.), 1932.

22. Reynolds, S. R. M.: Studies on Uterus—Responses of Nongravid Uterus of Unanesthetized Rabbit to Pituitrin and Pitocin, Am. J. Physiol., 92:430-435 (March), 1930.

23. Novak, E., and Reynolds, S. R. M.: The Course of Primary Dysmenorrhea, with Special Reference to Hormone Factors, J. A. M. A., 99:1466-1471 (Oct. 29), 1932.

24. Reynolds, S. R. M., and Allen, W. M.: Effect of Progestin Containing Extracts of Corpora Lutea on Uterine Motility in Unanesthetized Rabbits with Observation on Pseudo-Pregnancy, Am. J. Physiol., 102:39-55 (Oct.), 1932.

25. Kelly, G. L., and Florence, L.: Effect of Serum from Pregnant Women on Oestrual Cycle of Guinea-Pig—Preliminary Report upon Possibility of Its Use as Test for Pregnancy, Surg. Gyn. and Obs., 50:435-437 (Feb.), 1930.

26. Papanicolaou, G. N.: Specific Inhibitory Hormone of Corpus Luteum—Its Contrast with the Female Sex (Follicular) Hormone, J. A. M. A., 86:1422-1424, 1926.

27. Leonard, S. L., Meyer, R. K., and Hisaw, F. L.: Effect of Oestrin on Development of Ovary in Immature Rats, Endocrinology, 15:17-24 (Jan. and Feb.), 1931.

28. Frank, R. T., Goldberger, M. A., and Spillman, F.: Present Endocrine Diagnosis and Therapy—Critical Analysis Based on Hormone Studies in Female, J. A. M. A., 103:393-402 (Aug. 11), 1934.

29. Knauss, H.: A New Method of Determination of the Ovulation Term, Zentralbl. f. Gynak., 53:2193-2203 (Aug. 31), 1929.

30. Meyer, R. K., Leonard, S. L., Hisaw, F. L., and Martin, S. J.: Effect of Oestrin on Gonad Stimulating Power of Hypophysis, Proc. Soc. Exper. Biol. and Ther., 27:702-704 (April), 1930.

31. Moore, C. R., and Price, D.: Question of Sex Hormone Antagonism, Proc. Soc. Exper. Biol. and Ther., 28:38-40 (Oct.), 1930.

32. Nelson, W. D., and Overholser, M. D.: Effects of Oestrin Injections Upon the Experimental Pancreatic Diabetes in the Monkey, Proc. Soc. Exper. Biol. and Therap., 32:150-151 (Oct.), 1934.

DISCUSSION

HARRY J. DEUEL, JR., Ph.D. (University of Southern California, Los Angeles). — Although the pancreas unquestionably is the chief endocrine gland regulating carbohydrate metabolism, the indirect effect of such other glands as the ovaries also must be considered. Doctor Tedstrom's results, in which he has demonstrated an unusually low value for fasting blood-sugar levels in a number of cases of dysmenorrhea, indicate again their importance in carbohydrate metabolism. The readier susceptibility of women, as compared with men, to fasting ketosis suggests that the store of available glycogen is much less ample in the female.

Griesheimer (*American Journal of Physiology*, 109:45 (1934)), demonstrated that the blood sugar of normal women, after a thirty-six and a sixty-hour fast, had dropped from a normal level of 84 milligrams to 66 and 58½ milligrams, respectively. On the other hand, the blood sugars of male subjects taken at the same intervals were 86 (normal), 74 (thirty hours), and 64½ (sixty hours). The readier availability of carbohydrate in the male has also been noted in our laboratory, where it was found that the liver glycogen in fasting rats fed definite amounts of glucose was invariably higher, even after seventy-two hours of fasting, in the male animals than in the female. Following ovariectomy, the liver glycogen values obtained were significantly higher than on normal females, and even slightly exceeded those of normal males. That theilin was probably responsible for this variability was shown by the fact that the level of glycogen in ovariectomized rats was significantly reduced on the administration of theilin. In other experiments, we have shown that the ketonuria which develops in fasting rats, fed sodium aceto-acetate, is in inverse ratio to their glycogen content during fasting. The largest percentage of diacetic acid was oxidized and the lowest ketonuria was noted in castrated female rats. The extent of the ketonuria which developed under similar circumstances was somewhat higher in normal male rats, and considerably greater in the normal females.

However, we were unable to alter the ketonuria in castrated rats with theilin. This fact leads us to question whether theilin is the hormone in the ovary responsible for the alteration in carbohydrate metabolism. It seems probable that the hormone which causes the low liver glycogen also should bring about a greater development of ketosis. Because of the lower liver glycogen, a condition of hypoglycemia, as noted by Doctor Tedstrom, should obtain.

Because of our negative results on our ketosis experiments with theilin, we think that possibly the hormone in question may be progestin, and have suggested that its action on carbohydrate metabolism is not a direct, but an indirect one through the pituitary gland.

MARGARET SCHULZE, M. D. (University of California Medical School, San Francisco).—This paper is an interesting contribution to our knowledge of a condition whose therapeusis is still admittedly most unsatisfactory. The effect of estrin and progestin upon uterine contractibility has been fairly definitely established in both animal and human experiments, and the theory that essential dysmenorrhea depends upon an imbalance between them, resulting in excessive and painful contractions seems logical. It is possible that this imbalance may exert its effect through its influence upon carbohydrate metabolism. The dramatic relief of pain by intravenous glucose suggests a direct effect upon the uterine contractibility, probably analogous to the effect of the blood-sugar level upon the hunger contractions of the stomach, which was demonstrated by Carlson. It would be most interesting to try this out experimentally.

The simplicity of the method has much to recommend it in practice, since endocrine therapy is so often disappointing in its results, and in many instances prohibitively expensive. The method seems worthy of trial in

all cases of dysmenorrhea not dependent upon organic lesions, and should certainly be used before resort to any type of surgery in the functional cases.

*

EMIL BOGEN, M. D. (Olive View Sanitarium, Olive View).—The discovery that low levels of blood sugar, in both humans and animals, may give rise either to general skeletal muscle contractions, as in the convulsions of hyperinsulinism described by Harris and his followers, or to contractions of the smooth muscle of the stomach, or to hunger pains, as observed by Carlson, suggests that perhaps similar phenomena may occur in the smooth muscle of the uterus, and possibly thereby initiate or aggravate some of the symptoms accompanying the menstrual period. The psychic phenomena accompanying hypoglycemia may also, in some respects, resemble those accompanying dysmenorrhea. Such analogies, however, may be very misleading. Recent studies of Doctor Ziskind have shown that a large group of known epileptics not only had normal blood-sugar readings under ordinary conditions, but that the frequency of convulsions in this group could not be increased by the administration of doses of insulin resulting in considerable depressions of the blood sugar. Doctors Tedstrom and Wilson are to be thanked for having painstakingly accumulated and presented the data necessary for a similar evaluation of the rôle of hypoglycemia in dysmenorrhea.

As has been previously observed, the fasting blood sugar during the menstrual period is not consistently lower than that at other times. More observations, in the same and successive cycles, are required to show whether the lower figure found in the majority of the cases here reported represent a significant and persistent finding. Moreover, most of these values fall well within the range of normal variation. Case 11 is the only one which had a sufficiently low fasting blood sugar during the menstrual period to be considered distinctly pathologic and a probable cause of symptoms, although this might be suspected in a number of others with blood-sugar readings of 0.06 to 0.08 per cent. It is dubious whether the others may be spoken of as hypoglycemic, even though, in many instances, they were accompanied by symptoms that were relieved by the administration of carbohydrate.

The laborious sugar-tolerance curves here reported also fail to show any significant differences between the pancreatic function in the menstrual and intermenstrual periods. (The menstrual average of 0.076 recorded for the one-hour period in Group B on the proof is apparently an error, as the figures given actually average 100.) Delay in absorption of the sugar may be suspected in a number of cases where the half-hour reading showed little or no rise, rather than excessive pancreatic function. The group of women whose symptoms were relieved by administration of carbohydrate, however, in general showed a greater sugar tolerance, both during the menstrual and the intermenstrual periods, than those with no symptoms or those whose symptoms were unrelieved. More and repeated observations are required to determine whether this finding may be generally confirmed, and what may be its significance.

The administration of carbohydrate, even orally, may have other effects than merely the raising of the blood sugar. Even though the blood-sugar level is normal, raising it to abnormally high levels may relieve symptoms due to other causes, as in the treatment of increased intracranial pressure. But the psychic concomitants of the therapy, as well as the other physiologic effects of ingestion and injection may not be disregarded. Investigation of the possibility that the administration of insulin might initiate or aggravate menstrual discomfort in these patients would appear to be one aid in the unraveling of this problem. The writers are to be congratulated on the work they have done, and the desirable results empirically observed; and it is to be hoped that they will continue to investigate the mechanism of this therapy, and so establish more precisely its indications and limitations.

HEART DISEASE IN PHYSICIANS*

By ROBERT T. LANGLEY, M.D.
Los Angeles

DISCUSSION *by Eugene S. Kilgore, M. D., San Francisco; Willard J. Stone, M. D., Pasadena.*

THIS paper presents a statistical survey of the histories of 165 physicians who sought advice as to the presence of heart disease. It is interesting to note that diseases of the heart lead all other causes of death in physicians. These facts are significant: that the death rate in physicians increased from its lowest period in 1903, when it was 13.72 per 1,000, to a rate of 17.95 per 1,000 in the year 1923 (Emerson, H., and Hughes, H., Am. J. Pub. Health, November, 1926); that the average of death for physicians has gradually increased from 62.8 years in 1927 to 63.7 in 1930; that heart disease in physicians has been on the increase each year. Death from embolism and thrombosis have more than doubled in the five-year period reported by Hoffman between the years 1927-1932. Deaths from arteriosclerosis show a marked increase from 98 cases in 1926 to 190 in 1930. Results obtained concerning their health does not compare favorably with statistics concerning the general white male population as a whole. The study of "Deaths by Occupations in the United States in 1930," published by Whitney, shows that in the age group 15-65, the physicians had a higher total death rate than any other profession, and than any other sedentary occupation except café-keepers, blacksmiths, and tailors, and that their heart disease rate was higher than that of any other occupation except tailors, watchmen and doorkeepers. In as much as few men take up medicine because of heart trouble or poor health, and many do enter the other vocations named above for this reason, this certainly indicates a heart hazard in our profession. Causes for such a pronounced trend toward organic heart disease in physicians seem apparent. His régime is a strenuous one. His hours for eating and sleeping are irregular. His periods of relaxation are few, short and interrupted. He is exposed constantly to the rigors of changing conditions of weather. He is emotionally influenced by the condition of critically ill patients. Worry, anxiety and sympathy subconsciously assail him, since he is ever faced with the serious responsibilities and problems of life, death and suffering. Time for study and attendance at meetings crowd his busy life, if he is to keep pace with advances in his profession. He is seldom financially comfortable. His limited income, coupled with a demand for an acceptable personal appearance, efficient transportation, office overhead and scientific equipment, present a source of unavoidable concern. Then, too, he is ever in an environment of infection, and tends to ignore minor ills. Along with the factor of irregular meals there is the tendency

* Read before the General Medicine Section of the California Medical Association, at the sixty-fourth annual session, Yosemite National Park, May 13–16, 1935.

TABLE 1.—*General Classification*

165 Patients		
Oldest		77 years
Youngest		25 years
Average age		50 years
Age in Decades	**Cases**	**Per Cent**
Third	2	1.2
Fourth	27	16.3
Fifth	41	24.8
Sixth	57	34.5
Seventh	30	18.1
Eighth	8	4.8
Overweight	51	31
Use of alcohol	86	52.4
Use of tobacco	124	75.5
	Systolic	**Diastolic**
Maximum blood pressure	240	140
Minimum blood pressure	90	60
Average blood pressure	140	88
		Per Cent
Known living 132		79.8
Known dead 23		14.2
Unaccounted for 10		6.0

toward overeating and underexercising, with consequent obesity.

All these factors are unique in the life of a physician and conduce to drive him to the point of physical breakdown.

DISCUSSION OF TABLES

Tables 1 and 2 show in general the scope of this study. In the analysis of the diagnoses it is seen that most of the cases fell into the classification of degenerative cardiovascular disease. Of the entire group of conditions diagnosed, 75 per cent were found to be due to organic heart disease. Over 50 per cent of those examined were consumers of alcohol, and about 75 per cent used tobacco. The mortality of the group was 14.2 per cent for the period under observation, that is for periods varying from one to ten years.

Hypertension Group.—The hypertension group represents the largest number of organic diagnoses, or 21.9 per cent. In this series the largest number of cases fell in the sixth decade, and the period of observation from less than one year to over seven years. While there were no characteristic symptoms, it was found that over 50 per cent complained of distress which could be classified as heart pain. The next most notable finding was that of palpitation. The duration of symptoms in the majority of patients was from one to two years, while several were conscious of symptoms for ten years, or more. The mortality for this group was 11.1 per cent. A further fact of interest is that by far the greatest number of patients were conscious of symptoms for from one to two years only before coming for an examination. Several, however, had known hypertension for over ten years, and one for twenty years.

TABLE 2.—*Analysis of Diagnoses*

	Cases	Per Cent
Hypertension	36	21.9
Angina pectoris	10	7.3
Coronary sclerosis	25	15.2
Coronary thrombosis	12	7.9
Congestive heart failure	12	7.9
Normal heart	33	21.4
Cardiac neurosis	16	9.6
Irregular heart	20	14.6
Bundle branch block	7	4.2
Complete heart block	1	0.6
Incomplete heart block	1	0.6
Rheumatic heart disease	4	2.5
Thyroid heart disease	1	0.6
Number conditions diagnosed		178
Organic diagnoses		109
Functional diagnoses		69

TABLE 3.—*Age in Relation to Disease Groups*

	Oldest	Youngest	Average Age
Hypertension	76	32	57
Angina pectoris	63	42	57.8
Coronary sclerosis	70	32	53.6
Coronary thrombosis	63	47	56.5
Congest. hrt. failure	72	35	55
Normal heart	72	35	45.5
Cardiac neurosis	65	30	48
Irregular heart	76	35	55
Heart block	62	29	51
Rheumatic hrt. dis.	49	25	35

Coronary Thrombosis Group.—In the coronary thrombosis group four deaths occurred under one year. Two lived more than one year, and one lived two and one-half years. Those with a constant low systolic blood pressure and low pulse pressure had the poorest outlook, and conversely those with a normal pressure had a better outlook. Overweight was not a factor in these patients. Sudden deaths occurred in four instances, of which two were known to be due to coronary thrombosis, as proved by autopsy. Of the remaining deaths one must be classified as unknown and the remaining two died of congestive heart failure. The period of actual symptoms was found to be short for the whole group, those with prolonged symptoms living the shortest period. When recovery occurred the clinical and laboratory examinations were found to be practically normal after the first few months, particularly from the standpoint of blood pressure and pulse rate. Changing electrocardiographic records, for example, the restoration of *T* waves to normal, did not necessarily indicate a favorable prognosis.

TABLE 4.—*Disease Groups in Relation to Alcohol, Tobacco and Overweight*

	Per cent		
	Alcohol	Tobacco	Overweight
Hypertension	55.5	75	55.5
Angina pectoris	30	60	30
Coronary sclerosis	56	88	44
Coronary thrombosis	50	75	33.3
Congest. hrt. failure	33	75	8.3
Normal heart	60.6	63.6	21.2
Cardiac neurosis	40	73.3	26.6
Irregular heart	55	55	10
Heart block	22.2	33.3	33.3
Rheumatic hrt. dis.	25	100	75

TABLE 5.—*Period Under Observation*

	Per cent						
	1 year or less	1 to 2 years	2 to 3 years	3 to 5 years	5 to 7 years	7 to 9 years	10 years or more
Hypertension	8.3	30.4	27.7	19	8.2	5.5	....
Angina pectoris	20	20	10	30	10	10	....
Coronary sclerosis	12	8	16	36	12	16	....
Coronary thrombosis	33.3	16.6	16.6	16.6	8.3	8.3	....
Congestive heart failure	8.3	16.6	....	33.2	....	....	41.5
Normal heart	3	18.2	15.1	21.2	30.3	9	3
Cardiac neurosis	3.6	13.3	33.3	6.6	13.2	26.6	....
Irregular heart	20	20	30	5	15	10	....
Heart block	22	22	11	22	....	....	22
Rheumatic heart disease	....	....	25	....	25	50	....

Group Having No Heart Symptoms.—Twenty-five patients presented themselves for examination either with or without heart symptoms. These individuals had electrocardiographic changes which indicated coronary sclerosis. In comparison with the coronary thrombosis group, it was seen that these patients were under observation a much longer period of time; 36 per cent for from three to five years. The duration of symptoms here was from three to five years in 40 per cent, an improvement over that for the coronary thrombosis group. In this group, 20 per cent did not complain of heart pain. The mortality rate was only 8 per cent for the period under observation.

Angina Pectoris Group.—Ten patients had a clinical history of angina pectoris, and could for the most part have been included under the previous group except for the electrocardiographic records which failed to show any abnormality which would point to coronary disease. The outstanding complaint here, of course, was heart pain.

Congestive Heart Failure Group.—Twelve patients complained of the symptoms of congestive heart failure. It is interesting to note that several of this group were conscious of symptoms for ten years, and one for thirty years. One-third were dead at the time of making this study, and of these, all but one died a cardiac death.

Heart Block Group.—Those patients whose electrocardiographic records gave evidence of heart block were studied in one group. Of these there were seven cases of bundle branch block, and one each of complete and incomplete heart block. These patients without exception complained of symptoms referable to the heart. The most outstanding and interesting fact about these individuals is that of the nine under observation, for periods varying from less than one year to eight years, seven are living and only two are dead. Of the seven living, two have been under observation for from seven to eight years.

Rheumatic Heart Disease Group.—Only four patients make up the rheumatic heart disease group. As usual, these individuals are found to be long sufferers. None have died and the period of observation has been from two to eight years. Only one patient had a diagnosis of thyroid heart disease, and he is living and well, following thyroidectomy and after four years' observation.

Health Examination Group.—Thirty-three patients came to the office in order to determine the presence of heart disease and sometimes in the course of a periodic health examination. These, of course, must be separated from the group to be listed under the heading of cardiac neurosis. This normal group, so-called, frequently complained of precordial distress and many were at times heart-conscious.

Cardiac Neurosis Group.—Cardiac neurosis is represented by fifteen patients who were under observation from one to nine years. Of the symptoms, the majority complained of heart pain. Many were found to be annoyed by palpitation and weakness. It is of interest to note that the duration of symptoms in most cases was a short period. This would indicate that these individuals, being heart-conscious, lost no time in coming for examination, probably because of apprehension which usually accompanies cardiac neurosis. The

TABLE 6.—*Symptoms*

	No. Cases	Per cent				
		Precordial Distress	Palpitation	Irregular Heart	Tachycardia	Dyspnea
Hypertension	36	54.5	45.4	23.3	18.2	21.2
Angina Pectoris	10	100	20	20	16	50
Coronary sclerosis	25	80	64	36	....	44
Coronary thrombosis	12	100	....	....	....	25
Congestive heart failure	12	58.3	83.3	50	58.3	83.3
Normal heart	33	54.5	45.4	23.3	18.2	21.2
Cardiac neurosis	16	60	46.6	33.3	13.3	22.6
Irregular heart	20	60	70	33	....	45
Heart block	9	88	44	....	22	44
Rheumatic heart disease	4	25	50	25	....	75

TABLE 7.—*Mortality Table*

	No. Cases	Deaths	Per Cent
Hypertension	36	4	11.1
Angina pectoris	10	2	20
Coronary sclerosis	25	2	8
Coronary thrombosis	12	6	50
Congestive heart failure	12	4	33.3
Normal heart	33	1	3.03
Cardiac neurosis	16	0	0
Irregular heart	20	2	10
Heart block	9	2	22
		23	

mortality here was negligible; the only death being noncardiac.

Irregular Heart Action Group.—Irregular heart action was present in twenty patients. There is nothing outstanding in this group. Of the twenty cases there have been two deaths. Both died a cardiac death.

It is interesting to note that these tables show no diagnoses of syphilitic heart disease. The reasons for this are not entirely clear, and certainly if all patients in this series could be examined postmortem, evidence of syphilis undoubtedly would be found present.

RELATIONSHIP TO AGE

The age incidence table shows that 93 per cent of the patients with hypertension were evenly distributed over the fourth, fifth, and sixth decades, while rheumatic heart disease patients are seen only in the third, fourth and fifth decades. Angina pectoris is seen for the most part in the fifth, sixth and seventh decades. Some 60 per cent fell in the seventh decade. In the coronary thrombosis group, 75 per cent were found to fall in the sixth and seventh decades. Coronary sclerosis shows its appearance somewhat earlier, in that it is seen from the fourth to eighth decades—the majority of cases appearing in the sixth and seventh decades. In the congestive heart failure group, the majority of the cases—58 per cent—appeared in the sixth and seventh decades.

The tables submitted are obviously incomplete in many ways. Some interesting information has been presented, however, which is of value in a comparative way.

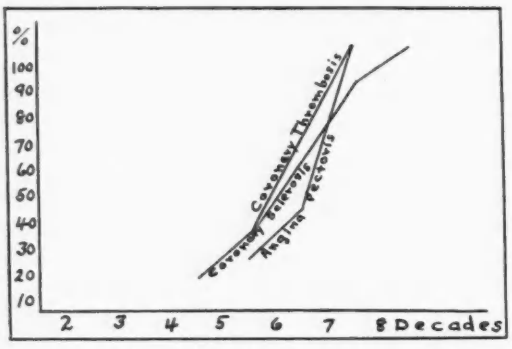


Chart 4-A.—Age in Decades.

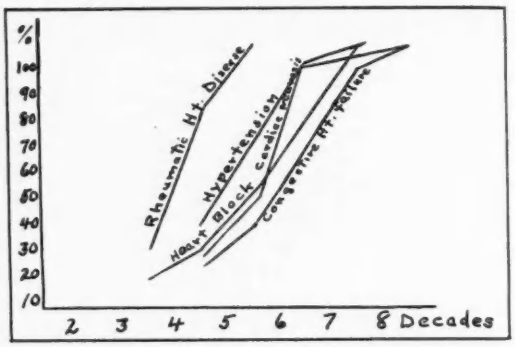


Chart 4-B.—Age in Decades.

COMMENT

Physicians, as a whole, are not good patients. They have abundant opportunity to observe the seriousness of heart disease. All too frequently they desire to have a hand in the treatment of their own illnesses. The restrictions and rules laid down for the usual patient with heart disease seem entirely unnecessary to a medical man. One sees gratifying exceptions to this rule. Undoubtedly the prognosis has been favored in some cases by a coöperative attitude based upon a realization of the seriousness of the problem to be faced. A firm decision to live within one's restrictions, whatever they may be, is a most hopeful sign. I have seen one physician attend a confinement case at night within ten days from the onset of a severe coronary thrombosis. Another was reported to be painting a garage at his beach house within three weeks from the onset of a similar condition. Suffice it to say, both died within a short time. All physicians examined are advised to report regularly for follow-up examinations. Only a small percentage do this. We have those therapeutic nihilists who doubt the value of any scheme of medical treatment. These Doubting Thomases argue the value of every grain of digitalis. One patient recently objected to taking theobromin or any of its compounds, stating that in his opinion theobromin was a urea-forming drug, and that he might increase his tendency to gout.

SUMMARY AND CONCLUSIONS

One can observe from all available data that heart disease is on the increase in physicians in this country. Exact reasons for this are not entirely clear from the available literature, nor from a review of the case histories of 165 patients studied here.

The indirect etiological factors very likely include the mental stress, irregular habits, exposure to disease, physical exhaustion, etc., which combine to harass the physician's life. Experience here also shows that while the medical man is reckless of health while well, he is also frequently regardless of his future, when ill.

1930 Wilshire Boulevard.

DISCUSSION

EUGENE S. KILGORE, M. D. (490 Post Street, San Francisco).—Doctor Langley's observations of physicians contain implications of wider significance. Essentially, he has depicted cardiovascular degenerative disease in a limited class. Part of the apparent increase in incidence may be debatable, *i. e.*, may be attributed to changing fashions of diagnoses as they appear on death certificates. But this applies equally to other portions of the population, and there appears to be no escape from the main conclusion that doctors fare badly in comparison with other groups. The reasons for this suggested by Doctor Langley are plausible to a degree, but not very convincing; for why should not the irregular meals cause digestive discomfort rather than arteriosclerosis: are not many other groups more exposed to inclement weather than the modern doctor in his closed car, and do not other professional men and business men have their worries perhaps as much as the doctor even if not his irregular hours of sleep?

And if the doctor's handicap is not impressive, he might be expected, *per contra*, to have a very great advantage. He is the repository of all that science can tell of how to prevent and control arteriosclerosis. Despite the shocking examples here described, he is, we trust, not below the general average in intelligence and prudence. So then this is the depressing general implication of the picture presented by Doctor Langley: that we know little and/or that we can or will use little of what we know about the prevention and treatment of degenerative disease. Not flattering, not comforting, not "constructive criticism," but truth; and as such it should be respected by those who write and go before the microphone to inform the public.

*

WILLARD J. STONE, M. D. (65 North Madison Avenue, Pasadena).—I, too, have been impressed with the apparent increasing mortality rate among physicians from heart disease. I have, however, not been convinced that the mortality among physicians was higher from heart disease than that which has occurred among the population as a whole during the past decade. It is probably true that the physician's life of anxiety and responsibility in an age of speed in all things has decreased his average span of life, but it is likewise true that the hurry of modern life, with less time for relaxation than our ancestors enjoyed, has in all probability shortened the lives of those in other walks of life who bear equal responsibility with its attendant worries and cares. The Metropolitan Life Insurance Company has recently published its mortality rates for the first seven months of 1935. The rates of death among 100,000 industrial policyholders were given as follows:

1. Diseases of the heart (excluding pericarditis, acute endocarditis and acute myocarditis, but including disease of the coronary arteries and angina pectoris), 201.7.

2. Chronic bright's disease, including cerebral hemorrhage, but excluding acute Bright's disease and cerebral thrombosis, 127.7. It will thus be seen that heart disease and chronic Bright's disease, which include the so-called vascular hypertension group, occupied the first two places among the causes of death among their industrial policyholders. This group probably represents a general average for the population as a whole.

It has been my unfortunate experience to encounter syphilitic heart disease among physicians rather frequently. It will serve a useful purpose if someone some day will compile some data and emphasize the penalty of a negative Wassermann and Kahn test in tertiary syphilis among the professional classes who, like physicians and dentists, may suffer accidental specific infection. The possibility of such a contingency should be considered in every case of chronic heart disease among physicians, purely from the clinical findings and irrespective of the blood report.

THE FREQUENCY OF BOTULISM*

By KARL F. MEYER, Ph.D., M.D.
San Francisco

IN a report[1] on the intoxications due to the ingestion of the poison generated by Cl. botulinum and parabotulinum, the data were thus summarized:

The 191 single or group intoxications reported in the United States and Canada, from 1899 to September, 1930, involved a total of 625 persons with 411 deaths. The case mortality rate had risen from 61.7 per cent in 1922 to 65.7 per cent in 1930; seventy outbreaks have been proved toxicologically and bacteriologically. For a number of years, particularly during 1926-1927, few authentic cases of botulism were reported, largely due to the after-effects of the flood of publicity which called attention to the possible danger inherent in inadequately sterilized or preserved food products, especially those home-canned.

INCREASE IN NUMBER OF INTOXICATIONS REPORTED

During the past six years a definite increase has been noted, and *in 1935 the single or group intoxications reached the alarming figure of twenty-two.* This total greatly exceeds the expectancy average, which during the period of intensive research on botulism—1918 to 1925, inclusive—was approximately thirteen outbreaks annually. In fact, it is noteworthy that eighty-six, or one-third of the total number of botulism outbreaks, occurred during the period from 1929 to 1935. It is reasonable to conclude that many of the preserving activities incident to the depression are largely responsible for this increase. However, it must be emphasized that in no instance was home-canned food, prepared and sterilized by a community cannery, involved in the intoxications.

ANALYSIS OF HISTORIES

An analysis of the histories of these tragedies leaves no doubt that, with one or two exceptions, the intoxications occurred among people in rural districts where they could not be reached by any method of warning. Understerilization or inadequate, careless curing have been the prime factors responsible for the botulinus spoilage. The majority of the unfortunate victims still used the antiquated cold-pack method of sterilization. They neither possessed the money nor the intelligence to operate successfully a pressure sterilizer. Moreover, they were not familiar with the standards of quality, and tried to salvage partly spoiled food. Home-canned string beans (sixty-nine outbreaks), approximately one-third of all the single or group intoxications due to vegetable products, continue to play an important rôle. Spoilage of this vegetable when preserved is sometimes so slight that the person opening the jar will fail to detect it. To serve string beans cold as salads, and to mask any odor which might arouse suspicion by the use of a vinegar dressing, is a common custom which only too often leads to botulism. *Until*

* From the George Williams Hooper Foundation, University of California, San Francisco.

TABLE 1.—*Geographic Distribution of the Single and Group Intoxications of Botulism During the Years 1899 to 1935*

State	Locally Grown and Home Canned	Commercially Canned or Preserved	Unknown	Total
Alabama	1	0	0	1
Arizona	0	1	0	1
California	72	17 (2 Italian)	12	101
Colorado	15	3	2	20
Connecticut	0	0	1	1
Florida	1	0	1	1
Idaho	6	0	0	6
Illinois	1	2 (1 Italian)	0	4
Indiana	1	2	0	3
Iowa	1	0	0	1
Kansas	1	0	0	1
Maine	1	0	0	1
Massachusetts	2	1	1	4
Michigan	1	3	0	4
Missouri	0	1	0	1
Montana	7	1	0	8
Nebraska	5	0	0	5
New Jersey	3	0	0	3
New Mexico	3	0	0	3
New York	7	3	2	12
North Dakota	3	0	0	3
Ohio	1	3	0	4
Oklahoma	1	0	0	1
Oregon	15	0	1	16
Pennsylvania	2	1	0	3
Tennessee	1	1	0	2
Texas	2	1	0	3
Utah	1	0	0	1
Washington	33	3	2	38
Wisconsin	1	1	0	2
Wyoming	3	2	0	5
Dominion of Canada	0	1	1	2
Total	191	47	23	261

every farmer's wife has been taught that all vegetables or other nonacid foods home-canned by the boiling water or oven process must be thoroughly boiled before they are served, botulism intoxication may be anticipated. Every agency, particularly those distributing glass jars for canning, bear a heavy responsibility. They should participate in the education of the masses as to the necessity for safe preservation of nonacid foods and for *boiling all home-canned vegetables before use.* The commercial packing industry has done its share to remove the botulinus menace. The public health workers, the home economics teachers, and the farm advisers, have done their part. The next step must be taken by the distributors of the containers commonly involved in botulism in recent years. They should discontinue the publication and dissemination of unsafe processing procedures.

SERUM THERAPY

The 261 single or group intoxications, collected over a period of thirty-six years, involved a total of 794 persons, with 517 deaths. The mortality rate has remained at 65 per cent. However, a perusal of the histories leaves no doubt that in the relatively few cases in which early serum therapy was instituted, the fatality rate has been definitely reduced. Although the case for or against the serum cannot be decided from the incomplete data, there are definite indications that the early intravenous administration of large amounts of Type A and B serum is beneficial. Furthermore, from recent personal observations in connection with an outbreak involving ten persons, it is the belief of those who saw these cases that the liberal use (one to two liters) of glucose solution (15 per cent) intravenously has been responsible for the

TABLE 2.—*Single and Group Intoxications Due to Botulism in the United States and Canada, 1899-1935*

Year	189 Home Preserved		47 Commercially Preserved		Unknown	Total
	Bacteriologically Proven	Bacteriologically Not Proven	Bacteriologically Proven	Bacteriologically Not Proven		
1899-1909	--	3	--	--	--	3
1910	--	2	--	1	--	3
1911	0	0	0	0	1	1
1912	1	2	0	2	--	5
1913	0	3	0	1	1	5
1914	1	1	1	0	--	3
1915	2	2	0	3	1	8
1916	3	2	0	0	2	7
1917	3	4	0	2	--	9
1918	3	9	0	1	1	14
1919	0	9	3	2	2	16
1920	1	3	4	2	1	11
1921	4	4	5	4	1	18
1922	11	6	1	1	4	23
1923	4	7	0	0	3	14
1924	4	4	2	2	--	12
1925	2	1	3	2	1	9
1926	1	2	0	0	0	3
1927	4	1	0	0	0	5
1928	3	3	0	0	--	6
1929	3	6	1 (Italian)	0	1	11
1930	0	5	0	0	--	5
1931	2	8	0	1 (Italian)	--	11
1932	5	10	0	0	--	15
1933	3	10	0	1 (?)	2	16
1934	0	4	1 (German)	0	1	6
1935	5	15	0	1 (?)	1	22
Total	65	126	21	26	23	261

relatively low mortality rate of 30 per cent. In combination with the antitoxin (5,000 to 10,000 units), this form of therapy deserves consideration and wider use. Velikanoff [2] has recently shown that in a series of 194 patients poisoned in Russia by the botulinus toxin, 119 were treated with serum. Only twenty-four, or 20 per cent, died, while in a series of seventy-five untreated patients the mortality was seventy, or 93 per cent. In the experience of the Russian observers, one may expect a reduction in the mortality, provided the serum is administered within the first twelve- to seventy-two hours after the ingestion of the botulinogenic food.

GEOGRAPHICAL DISTRIBUTION

As a whole, the geographical distribution of the American group intoxications has changed only slightly. The rural sections of the western states in the following order, California, Washington, Colorado, Oregon, Montana, Idaho, and Nebraska, continue to furnish the bulk of the observations (see Table 2). Oklahoma contributed its first group intoxication in 1935.

FOODS AT FAULT

In Table 3 the foods incriminated or proved to be responsible for the 261 outbreaks are listed. As already emphasized, home-canned string beans and corn continue to play an important rôle. Foreign, commercially preserved fish products and specialties have been connected with several intoxications. Unfortunately, the presence of the toxin has been demonstrated in only one of these commodities (smoked sprats). Of interest are the poisoning cases in San Jose, which followed the consumption of a fermented soy-bean mash,[3] and, the three cases at Selma, California,[4] due to cheese. In both instances the vegetable mash wrapped in a cloth sack, or the casein curd placed in a ten-gallon crock with the canvas cover side down, had been buried in the soil in order to aid the fermentation. Since Cl. parabotulinum Type A, most frequently found in the earth samples of the par-

TABLE 3.—*Foods Involved in Outbreaks of Botulism 1899-1935 (December)*

String beans	69	(Three commercially packed, not proven)	Pickles	1	(Home canned)
Corn	28	(One commercially canned) (One commercially packed, not proven)	Pimientoes	1	(Home canned)
			Salad dressing	1	(Home canned)
Olives	14	(Thirteen commercially packed) (One home canned)	Shallots, Muscari	1	(Commercially packed in Italy)
			Soy beans mash "Natto"	1	(Home preserved)
Spinach or chard	18	(Nine commercially packed, four proven direct, one indirect)	Succotash	1	(Home canned)
			Squash	1	(Home canned)
Beets	11	(Two commercially packed, one proven indirectly)	Tomato catsup	1	(Commercially packed ?)
			Tomato relish	1	(Home canned)
Asparagus	10	(Home canned)	Tomato juice	1	(Home canned)
Chili peppers	6	(Home canned)	Turnips	1	(Home canned)
Pears	4	(Home canned)	Vegetable soup mixture	1	(Home canned)
Apricots	3	(Home canned)	Yellow beans	1	
Figs	3	(Home canned)		199	
Okra	2	(Home canned)			
Peas (?)	2	(One commercially packed, not proven)	Porkproducts	11	(Home preserved)
Antipasto (Italian)	2	(Commercially packed)	Sea food	11	(Six commercially canned)
Apricot butter	1	(Home canned)	Beef	5	(Home preserved)
Cauliflower	1	(Home canned)	Sardines	2	(Two commercially canned)
Celery	1	(Home canned)	Spratts	1	(Commercially canned)
Dried beans	1	(Home canned)	Cheese	4	(Home preserved)
Greens and turnip tops	3	(Home canned)	Chicken	2	(Home preserved)
Green tomatoes	1	(Home canned)	Milk	1	(Commercially canned)
Home brew	1	(Home canned)	Potted meat	1	(Commercially canned)
Mangoes	1	(Home canned)	Sausage	1	(Commercially preserved)
Mushrooms	1	(Home canned)		39	
Peas, string beans and carrots	1	(Home canned)			
Persimmons	1	(Home canned)	Unknown (inclusive one home prepared food)	23	
Eggplant	1	(Home canned)	Total	261	

ticular regions in which these observations were made was isolated, it is reasonable to suspect that the food articles became impregnated with these soil anaerobes. The family who prepared the cheese descended from a race of people (Armenians) accustomed to cure their dairy products by placing them in the dry desert soil. What was, doubtless, a harmless and convenient method of preservation became a very risky procedure in a part of the world in which the spores of Cl. parabotulinum are ubiquitous. Although understerilized plant products were involved in 76.3 per cent of the cases, it is important to emphasize that animal products (14.9 per cent) continue to play a rôle in the outbreaks. Among the newer foods associated in the recent fatal cases, home-canned pork, salmon, and crab meat must be mentioned.

DIAGNOSIS

The investigation and ultimate confirmation of the clinical diagnoses leaves a great deal to be desired. It is indeed unfortunate that less than one-fourth of the intoxications were confirmed by the demonstration of the toxin in the foods apparently responsible for the illness or the deaths. The remoteness of the farms or homesteads on which these accidents occurred, the late recognition or notification of the sickness may be in part responsible. On the other hand, it is evident that the public health authorities in some of the western states failed to investigate the cases of poisoning when suitable specimens for study were still available or competent epidemiologists could have clarified the puzzling problems involved. By comparison with the period 1918 to 1924, *the interest in botulism as a public health problem has lost a great deal.* It is hoped that the distressing facts exhibited by the 1935 statistics on botulism will arouse enough curiosity for a renewed consideration of this important and generally preventable disease. Furthermore, it is the duty of the health officers and food-control agencies to wage a relentless educational campaign to acquaint the public with the inherent dangers of *inadequately processed or abnormally fermented spoiled foods.*

Third and Parnassus avenues.

REFERENCES

1. Meyer, K. F.: Am. Jour. Pub. Health, 21:762, 1931.
2. Journal of Microbiology and Immunology, 12:211, 1934.
3. California and Western Medicine, 41:321, 1934.
4. California State Department of Public Health, Weekly Bulletin, Vol. 14, No. 5, p. 17, 1935.

THYROID GLAND: TOXIC ADENOMA WITH NORMAL OR LOWERED BASAL METABOLIC RATE*

By HENRY HUNT SEARLS, M.D.
San Francisco

DISCUSSION *by Wallace I. Terry, M.D., San Francisco; Clarence G. Toland, M.D., Los Angeles; Carl L. Hoag, M.D., San Francisco.*

IN the study of adenomatous goiter at the University of California Hospital, evidence of toxicity has been noted commonly in patients with the clinical picture of hypothyroidism, and with normal or subnormal basal metabolic rates. The frequency of this apparent paradox appears to be sufficient to warrant comment and to stimulate the search for its explanation.

PLACE OF THE LABORATORY REPORT IN DIAGNOSIS

The medical student is warned that, in the development of a diagnosis, laboratory findings should serve only as adjuncts to the carefully developed history and physical examination of the patient. Such tests have great significance when properly evaluated, but there is a distinct tendency in medicine generally to place too much weight on laboratory data and too little reliance on clinical judgment. Thus, the medical profession (and the laity as well) are very prone to accept the laboratory report of the basal metabolic rate as the chief and final criterion of toxicity in the patient with goiter. Should such a rate prove to be within or below normal limits, the patient too often is reassured and treatment withheld. In these patients, although the signs and symptoms which are associated with increased metabolism (feeling of warmth, hyperhidrosis, increased appetite, and loss of weight) may be absent, evidences of neurocirculatory poisoning (tremor, increased emotionalism, irritability, and attacks of palpitation) frequently may be elicited. There even may be the picture of advanced toxic myocarditis with auricular fibrillation and cardiac decompensation.

ON THE BASAL METABOLIC RATE

In the study of the patient with goiter the presence or absence of such signs and symptoms should be determined even though the basal metabolic rate is normal or subnormal. Such an analysis frequently will be rewarded by the recognition of findings referable to toxicity.

These patients may have the classical signs and symptoms of hypothyroidism, as well as evidence of toxicity. They commonly will be overweight, with a hypothyroid type of distribution of fat, dry skin and intolerance to cold. The hair may be coarse and scant, the mentality dulled, and often there is an increased need for sleep.

It is quite evident from a study of the literature that the fallacy of dependence on the basal metabolic rate has been recognized frequently.

Morris[1,2] and Reid[3] of Cincinnati noted normal and subnormal basal rates in patients, both with nodular and with diffuse goiter, who showed signs and symptoms of toxicity and who were relieved by operation. After operation, they often observed a return from subnormal to normal basal metabolic rates. In their opinion, when there is a demonstrable goiter associated with clinical evidence of thyrotoxicosis, a normal or subnormal basal metabolic rate should be disregarded entirely.

Gilman and Kay,[4] in 1930, advised that toxic adenomata may be present in the patient who has a normal or subnormal basal metabolic rate.

Wohl[5,6] recently described patients with "hyperthyroidism" (without, however, differentiating between adenomatous and hyperplastic types) exhibiting a lowered basal metabolic rate.

McGregor[7] recognized the patient with adenomatous goiter showing signs and symptoms of toxicity without rise in the basal metabolic rate.

Coller and Arn[8] noted fibrillation and a peculiar nervousness in patients with adenomata of the thyroid who exhibited normal or subnormal basal metabolic rates. Following removal of the adenomata, the toxic symptoms disappeared and in about one-half of their patients with subnormal basal metabolic rates, there was an increase toward the normal.

Although not within the scope of this discussion, one might mention the numerous references, especially in the French and American literature, to the frequent occurrence of hyperplastic (exophthalmic) goiter without increase in basal metabolic rate—the "formes frustes Basedow" of Charcot and the "masked" or "burned out" hyperthyroidism of the American observers.

HYPOTHYROIDISM WITH "HYPERTHYROIDISM"

In attempting an explanation of the apparent antagonism of hypothyroidism in association with symptoms and signs of so-called "hyperthyroidism," a number of factors must be considered. First, it is felt that the secretion from adenomatous tissue differs physiologically from that of the thyroid gland proper, inasmuch as it poisons the central nervous and cardiovascular systems. Both types of secretion are capable of raising the basal metabolic rate, but the secretion from the adenomatous tissue cannot be substituted for that of normal thyroid tissue. In other words, secretion from adenomatous tissue represents a type of thyroid dysfunction.

Secondly, the patients who exhibit this peculiar picture of toxic adenomatous goiter with hypothyroidism commonly have had preëxisting colloid or adolescent goiter which are types associated with lowered thyroid function.

Thirdly, the growth of the adenomata within the thyroid gland causes fibrosis and pressure-atrophy of the glandular tissue in which they are developing, and thereby further reduces the output of normal secretion (Fig. 1). Evidence of former inflammatory reaction occasionally can be noted in the enveloping glandular tissue and may indicate even additional crippling of thyroid function.

* From the department of surgery, University of California Medical School.
Read before the General Surgery Section of the California Medical Association at the sixty-fourth annual session, Yosemite National Park, May 13 to 16, 1935.

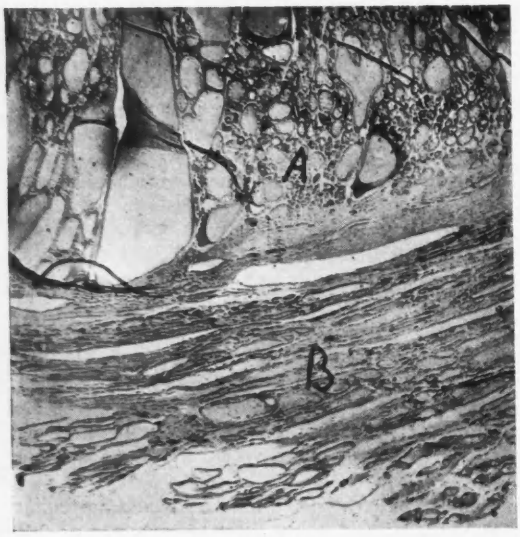


Fig. 1.—Photomicrograph of a section of an adenoma which, by its growth, has caused pressure atrophy and fibrosis of the surrounding thyroid tissue; *A*, adenoma; *B*, compressed thyroid.

CLINICAL EXHIBITION OF A HYPOTHYROID STATE WITH LOWERED BASAL METABOLIC RATE

Bearing in mind this conception of the normal and abnormal anatomic and physiologic picture of the adenomatous goiter, a possible explanation can be advanced for the clinical exhibition of a hypothyroid state with lowered basal metabolic rate in a patient presenting signs and symptoms of toxicity.

The thyroid gland proper, having had previously the somewhat lowered function associated with adolescent or colloid goiter, has become atrophic from the pressure of the adenomata growing within it, and thereby suffered further reduction of its secretory output. Secretion from the adenomata being abnormal, and therefore incapable of substitution for the normal secretion, the clinical picture of hypothyroidism develops.

Both types of secretion are capable of raising the basal metabolic rate toward the normal reading. If, however, the gland proper has been badly atrophied, its secretion may be so scant as to have little influence on metabolism. In such an instance the secretion from the adenomata struggles alone to raise the rate toward normal, frequently falling short of, or just reaching this goal. Along with its ability to raise the basal metabolic rate toward a zero reading, this abnormal secretion poisons the cardiovascular and central nervous systems. As a result, such a patient presents the picture of hypothyroidism with a normal or subnormal basal metabolic rate, together with evidence of toxic myocarditis and poisoning of the central nervous system.

TREATMENT

Removal of all adenomatous tissue with careful preservation, as far as possible, of the gland proper is the evident treatment of choice.

Following such operative procedure, there is a tendency for a regeneration and return to function of the remaining tissue; which, together with the administration of thyroid substance (contraindicated in these patients before removal of their adenomata), will alleviate the hypothyroid state. Concomitant relief from the nervousness, increased emotionalism and cardiac symptoms may be spectacular.

SUMMARY

1. The patient with adenomatous goiter frequently exhibits toxic signs and symptoms together with a more or less advanced hypothyroidism.

2. In such instances the basal metabolic rate may be normal or even subnormal; therefore it should not influence the diagnosis or treatment.

3. An attempt has been made to explain this apparent paradox.

4. Removal of the adenomata offers relief of toxic symptoms and may lessen the hypothyroidism.

University of California Hospital.

REFERENCES

1. Morris, R.: The "Thyroid Heart" with Low Basal Metabolic Rate, Am. J. M. Sc., 181:297 (March), 1931.

2. Morris, R.: Thyrotoxicosis "Masked" by Normal or Subnormal Basal Metabolic Rate, Internat. Clin., 3:64 (Sept.), 1933.

3. Reid, M. R.: The Treatment of Thyroid Intoxication, West Virginia M. J., 28:452 (Oct.), 1932.

4. Gilman, P. K., and Kay, W. E.: Remote Symptoms of Unrecognized Adenomata, with Low Basal Metabolic Rate Relieved by Operation, Am. J. M. Sc., 180:405 (Sept.), 1930.

5. Wohl, M. G.: Masked Hyperthyroidism, Tr. Am. Therap. Soc., 32:162, 1932.

6. Wohl, M. G.: Atypical Hyperthyroidism and the Significance of the Basal Metabolic Rate, Med. Rec., 140:372 (Oct. 3), 1934.

7. McGregor, J. K.: The "Atypical" in Thyroid Work, Am. J. Surg., 6:217 (Feb.), 1929.

8. Coller, F. A., and Arn, R. D.: Thyroidectomy for Goiter without Hyperthyroidism—Postoperative Results in Adenomatous Goiters with Hypofunction, West. J. Surg., 39:501 (July), 1931.

DISCUSSION

WALLACE I. TERRY, M. D. (384 Post Street, San Francisco).—There is little doubt that many medical practitioners are inclined to minimize the importance of toxic adenomas of the thyroid in the absence of an increased basal metabolic rate. Doctor Searls has rightly maintained, in substance, that the basal metabolic rate is not a true measure of the toxicity of adenomata, and that the laboratory findings should be correlated with the clinical picture.

We should differentiate between the hyperthyroidism due to hyperplasia of the thyroid gland (exophthalmic goiter) and that due to long-standing adenomas of the thyroid (nodular goiter). In the former, the onset of nervousness, tremor, tachycardia, loss of weight and eye signs is rapid, and can usually be measured in days or weeks; whereas in nodular goiter we ordinarily have a history of goiter without symptoms for a period of years before the onset of nervousness, tremor and tachycardia, but no eye signs, such as exophthalmos, unless there is also a concurrent hyperplasia of the thyroid gland proper. To these we should add the varied basal metabolic readings of the two diseases, as brought out by Doctor Searls. There are other reasons for opposing the idea that ex-

ophthalmic goiter and toxic adenoma are not essentially the same disease, but these need not be brought in here.

I fully concur with the author's conclusions.

❦

CLARENCE G. TOLAND, M. D. (1930 Wilshire Boulevard, Los Angeles).—In a recent analysis of three hundred cases of toxic adenomatous goiter we found that approximately 8 per cent of this group showed a subnormal metabolic rate. The metabolic rates varied from minus three to minus twenty-eight. In evaluating the surgical possibilities of cases such as these, the clinician with a limited thyroid experience will be prone to place too much emphasis upon the metabolic rate. A confused diagnosis results, and the necessary surgical enucleation of the adenoma may be indefinitely deferred.

We are indebted to Doctor Searls for his efforts in bringing to our attention the proper procedure in the management of this unusual type of goiter.

Not all of these cases tend to obesity. In our series about 50 per cent had a definite loss of weight, but there were lacking the signs of vasomotor instability so characteristic of the hyperthyroid individuals.

We found it of value, particularly in the obese types, to preface thyroidectomy with a course of thyroid extract, and this was usually continued after operation until the residual gland had apparently attained its maximal recovery. As Doctor Searls has pointed out, it was assumed that the adenoma produced the hypothyroidism by pressure upon the normal thyroid tissue, while at the same time causing a toxicity from an internal secretion of its own.

In contradistinction to the more or less radical subtotal thyroidectomy employed in the usual goiter, it is extremely important in these cases to adopt conservative measures. When performing the enucleation of the adenoma, an effort should be made to preserve as much normal thyroid tissue as possible. This will tend to lessen the period of regeneration, and will spare the patient the inconvenience and inadequacy of prolonged thyroid medication.

❦

CARL L. HOAG, M. D. (384 Post Street, San Francisco). I am in entire accord with Doctor Searls in regard to this group of goiter patients who show clinical signs of both hyper- and hypothyroidism, and of the necessity for preserving all of the normal thyroid tissue, even to the thinnest portions of the capsule. This was pointed out by me in a paper read before the sixtieth annual session of the California Medical Association in April, 1931.* It is timely that it be emphasized again, however, because many internists are still loath to accept it.

It was first called to my attention when caring for a number of patients who were scheduled for surgery when the first basal metabolic determinations became available in 1917. This group of clinically toxic adenomata proved to have normal or subnormal rates, and for this reason surgery was withheld. Eventually, however, all these patients were operated upon, in spite of the apparently contradictory laboratory findings. The adenomata were removed and the toxic symptoms disappeared. Some regained normal thyroid balance, while others remained hypothyroid and had to receive thyroid substance. This gave me my first intimation that these adenomata acted much like foreign tumors and, although they tended to elevate the basal rate and give signs of toxicity, at the same time they crowded out the normal gland, appropriated its blood supply and decreased the function to an abnormal degree. This explained the mixed clinical picture.

My experience since that time has confirmed this conception, and Doctor Searls has done well in again calling it to the attention of the profession.

* Printed in the March, 1932, issue of CALIFORNIA AND WESTERN MEDICINE.

THE UREMIA OF CIRCULATORY FAILURE*

By A. A. ALEXANDER, M.D.
Oakland

DISCUSSION *by John C. Ruddock, M. D., Los Angeles; Thomas Addis, M. D., San Francisco; Fletcher Taylor, M. D., Oakland.*

C. V., an American electrician, age 42, entered the hospital in March, 1926, several weeks after the latest of a series of attacks of appendicitis. He had been repeatedly observed for more than a year and, with the exception of his recurrent appendicitis, showed nothing remarkable. His blood pressure was 130 to 140 millimeters of mercury, and the urine was normal. The surgeon encountered no difficulty in removing a slightly injected appendix. There was no postoperative shock. On the third day after operation, he developed hiccoughs, then nausea and vomiting. His blood pressure was low, his blood urea was 94 milligram, then rose to 118 milligrams, and on the eighth day he died, in uremia. His operative field was satisfactory and the kidneys were structurally normal.

COMMENT

These brief observations obviously leave much to be desired; but the question that I could not escape was this: By what mechanism did this patient die in uremia with apparently normal kidneys?

FUNCTION OF KIDNEYS

Kidney function may be divided into two processes. First, a rather simple phenomenon of filtration through the walls of the glomerular capillaries into the capsule. Normally, colloid molecules such as proteins do not pass; but otherwise the filtrate in the capsule is essentially identical, in character and concentration, with the plasma. The glomerular capsule is a colloidal membrane and a certain supply of oxygen is necessary to preserve its integrity; but functional activity apparently consumes no oxygen. It is, in effect, a passive filter.

The functional capacity of a filter is governed by three factors: (1) the physicochemical character of the material to be filtered; (2) the condition of the filtering membrane; and (3) the difference in pressure between the two sides of the filtering membrane. In the case of the kidney, the third factor will be, in a considerable measure, a determinant of the other two. The second renal process relates to the tubules. They perform an active function, and so consume more oxygen than do the glomeruli. As the urinary filtrate passes along the tubules, it is modified and concentrated by a process of differential absorption. Those materials which may be utilized in the economy—threshold substances—are reabsorbed to whatever extent may be necessary to restore the optimum concentration in the plasma. Sugar is entirely reabsorbed; water, sodium and chlorin as needed. The remaining materials, creatinins, sulphates and the like, are nonthreshold substances, and are not absorbed in any appreciable amounts.

The normal intravascular pressure in large vessels is, of course, between the diastolic level of about 80 millimeters of mercury and the systolic of 120 millimeters. The pressure in small vessels

* Read before the General Medicine Section of the California Medical Association at the sixty-fourth annual session, Yosemite National Park, May 13-16, 1935.

is about 20 per cent less. Hence the actual pressure within the renal vessels lies between 65 and 100 millimeters. Opposing this pressure, the plasma colloids exert an osmotic tension equivalent to about 40 millimeters of mercury. Therefore, the net pressure of filtration for the kidney is about 60 millimeters, the optimum pressure for maintaining filtration. In hypertension much higher pressure values appear, but they are only the expression of the energy required to maintain working pressure in the capillaries through the intervening arterial resistance. Physiologically, there is a considerable adjustability or compensation for fluctuations in net differential pressure; but long-continued departure from the optimum is attended with glomerular impairment, either functional or structural, or both.

Mention may be made of familiar instances of renal insufficiency developing out of disturbance of the above pressure relationship. It is common knowledge among urologists that, in obstructive disorders, the kidney ceases to function when the intravesical and intra-ureteral pressure are maintained at or above 80 millimeters of mercury; that is, the net pressure is zero, and again in congestive failure and toxic heart, as in pneumonia, as the venous pressure rises in opposition to arterial pressure, oliguria, albuminuria and blood nitrogen accumulation tend to ensue. As pointed out by Foster,[1] uremia, as connoted by the rising level of nonprotein nitrogen in the blood, is purely circulatory and independent of any structural pathology of the kidneys. Experimentally, too, if the renal veins or the aorta above the renal arteries be constricted, producing a fall in renal vascular pressure, the same syndrome of anuria, albuminuria and azotemia ensues. The disturbances in $O\text{-}CO_2$ balance, if maintained, alter the permeability of the glomerular membrane, so that, in addition to its lowered filtration capacity, it permits the escape of albumen and blood cells; but it is to be noted that primarily the changes involved are functional, and that with reasonably prompt restoration of balance the kidney recovers without structural damage. If, however, the disturbed capillary pressure relationships cannot be restored, loss of appetite, weakness, stupor, coma, and death follow from latent uremia. This type of uremia is characterized by moderate to high concentration in blood nitrogen, and the absence of any rise in blood pressure (Wright[2]).

REPORT OF CASES

We present here, from a small group of seven cases, the histories of two patients who developed an interesting mechanism of vascular failure with urinary suppression and uremia. The cases studied have all been related to trauma, not necessarily operative nor with anesthesia. So far as could be determined all of these patients had normally functioning kidneys both before trauma and after recovery; and in those who died and were autopsied the kidneys were found structurally normal. No patients have been included who had known renal disease, or whose trauma involved interference with the urinary tract. One typical fatal case was seen following cystoscopy and ureteral catheterization. These conditions offer an added element of risk because of the local conditions, and for obvious reasons are omitted, although we believe some of them could properly be added to the group.

CASE 1.—W. R., 24409, a garageman, age 65, was admitted to the hospital on October 15, 1931, suffering from a fracture of the femur. Without anesthesia the leg was put in traction. He had always enjoyed good health. His blood pressure had been 150 to 160, and there had been no evidence of renal disease. His urine on admission was normal, containing no casts or blood cells. There was no apparent shock. During the next days he suffered considerable pain, and consumed but little water. His urinary output averaged 425 cubic centimeters, but was normal chemically and microscopically. When seen on the fifth day he was mildly stuporous, refusing food or drink, and vomited several times. The pulse was regular: 80 to 90. Temperature was 101; respirations, 20. Blood pressure was recorded as 100/80. The blood urea was 91 milligrams per cent. The patient was given 1,000 to 1,500 cubic centimeters of 10 per cent glucose in normal saline per day intravenously and caffein sodio benzoate 0.5 gram intramuscularly every four hours, with an increase in urinary output to 800 cubic centimeters; but the blood urea was 91 milligrams. The abdomen became markedly distended, with no discoverable peristalsis, the urine dropped to 400 cubic centimeters, and the blood urea rose to 118 and 120 milligrams. The urine showed a trace of albumen and occasional hyalin casts. The paralyticileus added to the difficulties, but was ultimately overcome. The intravenous fluids were maintained, and on the eleventh day he was only mildly stuporous, with an output of 1,100 cubic centimeters and a blood urea of 88 milligrams. Three days later the urea was 40 milligrams, and he was quite himself mentally. The blood pressure, which had remained between 90 and 100 during this time, rose as the blood urea fell. At the end of a month the pressure, blood urea and urine were normal and have remained so to the present.

* * *

CASE 2.—Mrs. H., 2281C, an American housewife, age 42, had been observed by her physician for ten years. She had had the usual childhood diseases and had two children alive and well. Her only complaints had been a series of respiratory infections, for which her tonsils had been removed about five years ago, and a urethral caruncle about six months, which was cauterized with relief six months before entry to hospital. Repeated urinary examinations had been negative. She entered Samuel Merritt Hospital on September 25, 1934, for surgical relief from cystocele and rectocele, with moderate prolapse of the uterus and endocervicitis. On admission her physical examination was negative; the heart and lungs were normal; blood pressure, 138/90; urine: neutral, specific gravity 1010, no albumen or sugar, pus cells in clumps. At operation, on opening the abdomen several fibroids were discovered, and the uterus, tubes and appendix were removed. The operation required an hour and a half, but presented no difficulties and there was little hemorrhage. The patent left the operating room in excellent condition; pulse, 96 and of good quality; respiration, 20. The patient was in satisfactory condition for twenty-four hours, received 1,000 cubic centimeters of normal saline per rectum, took some water and vomited at intervals; but then became restless and apprehensive, and showed some mental confusion. Blood pressure declined rapidly to 40/0. The pulse rate rose to 140, respiration 10 to 12. There was complete anuria. Blood urea was 57 milligram per cent, and it was noted that the serum albumen-globulin ratio was reversed. Caffein and glucose solution were given liberally, but the pressure did not rise, nor was there any urine. The patient grew more restless and delirious, then sank into coma and died.

Autopsy.—The field of operation was explored and found in excellent condition. There was no hemorrhage. The ureters were explored and found intact. No evidence of embolus could be found. The kidneys were removed

and appeared quite normal, although somewhat congested. The heart and lungs were normal. Microscopic examination of kidney by Doctor Glenn showed normal architecture and blood vessels. There was moderate interstitial congestion, and some extravasation of blood cells into the tubules.

COMMENT

It is apparent that in the first of these patients the process developed rather insidiously over a period of days, while in the other it was abrupt and profound, but the mechanism was the same. We have studied seven patients in this series; two following appendectomy, four following fractures (none had anesthesia), and one following pelvic surgery. The critical level of reduced blood pressure had varied between 100 and 40 millimeters of mercury. It appears not unlikely that the phenomenon is not a simple vasomotor collapse, but rather a loss of circulating fluid into the tissues, of which the fall in blood pressure is a sensible index.

MEDICAL SHOCK

Clearly, in these reported cases, as in the remainder of the series, the mechanism is one of delayed shock. Traditionally, shock has been associated in the mind with trauma or hemorrhage, whether surgical or accidental. It is, appropriate, however, to consider certain medical conditions in the same category. As Atchley[3] has said: "Doubtless there are better words than 'medical shock,' but the well-known connotation of 'shock' makes it a word difficult to discard"; and again MacFee and Baldridge[4] observe: "If we bear in mind that severe trauma may be inflicted upon the body by certain bacteria, by chemical poisons, by privations, and in many ways other than mechanical, the widespread possibilities of shock are recognized. The involved nature of the condition precludes definition, since it is impossible to contain in a single phrase the collective physiologic changes that occur." In addition to trauma or hemorrhage, burns, sunstroke, intestinal obstruction, snake-venom poisoning, heat prostration, hyperemesis, dysentery and cholera (Rogers[5]), Addison's disease, acute coronary occlusion, diabetic anhydremia or ketosis, and some of the acute infections, such as pneumonia, involve in addition to or as part of their characteristic picture, the elements of shock. In all of them there is a significant fall in vascular pressure, "the physiologic result of an acute disparity between the circulating blood volume and the functioning capacity of the vascular bed" (Atchley[6]).

The time elapsing from trauma until the onset of symptoms has varied from twenty-four hours to five days, but in medical shock it may be longer. Apparently, three factors contribute. First, the loss of fluids: Coller and Maddock[7] estimated that the average surgical patient, in simple surgical procedures such as tonsillectomy, will lose from 3,000 to 4,000 cubic centimeters of fluid per day, "the insensible fluid loss" through skin, lungs, etc. Second, the summation of stimuli. Freeman[8] found that continued administration of adrenalin resulted in a loss of 14 per cent of blood volume and purely affective states in a loss of 21.9 per cent of volume. And, third, a large majority of these patients during a period of days suffer a loss of body proteins, which results in an imbalance of osmotic pressure between tissues and blood; that is to say, a migration of water from the capillaries into the tissues and a corresponding increase in plasma colloid concentration. The net result of the disturbed mechanism is a fall in blood pressure, and urinary output, with a urine of higher concentration.

SHOCK IN RELATION TO KIDNEY FUNCTION

It is the purpose of this discussion to emphasize the influence of these hypotensive crises of shock, whether medical or surgical, upon the functional activities of the kidneys, and the toxic condition (uremia) resulting therefrom. The physiologic relationships have been outlined in the early paragraphs. Clinically, there have been surprisingly few observations. Evans[9] reported a case similar to the second one here reported, and Steinberg[10,11] has published observations upon blood urea and kidney function in coronary thrombosis. He maintains that the fall in vascular tension is not wholly responsible for the disturbed renal function. In this we agree, but we contend that its occurrence is an essential result of the underlying physiologic disturbances. The disturbance of blood nonprotein nitrogen in postoperative patients has been discussed by Derow.[12] Rogers[5] has urged shock therapy in cholera, and pointed out the disturbance of kidney function.

THERAPY

Therapy in these cases of shock with uremia offers a fair prospect of success if the condition is recognized early. Patients, such as the second one cited, who show a rapid, profound drop in pressure, offer a poor outlook; but those in whom a less critical drop appears, rapidly lose ground with time. Frequent observations as to blood pressure, and the balance of fluids and urinary output, with blood urea estimation in those who show material change, may be instrumental in saving life. Our experience is in harmony with Atchley,[6] who says: "The longer the state of shock is permitted to exist, the more difficult it is to alleviate it and the higher the mortality."

It has many times been contended that relaxation or paralysis of the peripheral vessels occurs in shock and that, therefore, vasoconstrictors, such as ephedrin, adrenalin or pituitrin, are indicated. Freeman has shown that prolonged vasodilatation does not result in loss of blood volume, but the reverse, and biopsies have shown the smaller arteries are constricted in shock. Therefore, the administration of vasoconstrictors tends only to increase the disadvantage of the capillary circulation. It is our belief that caffein in fairly large doses, affecting, as is asserted, a dilatation of smaller arteries, is the stimulant of choice.

Obviously, the chief effort in therapy should be directed toward correcting the "disparity between the circulating blood volume and the functioning capacity of the vascular bed." Because of the depressed condition of peripheral circulation, sub-

cutaneous or intramuscular absorption is greatly slowed, and response is correspondingly delayed. The route of administration is necessarily intravenous. While no arbitrary rule can be offered, the volume administered must be relatively large, 2,000 to 4,000 cubic centimeters in twenty-four hours. Fluid should be added until the twenty-four hours urinary output is 1,500 cubic centimeters or more, and of a specific gravity of 1,020 or less. We are in agreement with Derow, who says, "It must be stressed that the volume of urine, and not the volume of fluids given, is important."[12] As progress is made, the fluids may, of course, be administered by other than intravenous channels.

As a rule the first attack should be 1,000 cubic centimeters of 10 per cent glucose in normal saline. It furnishes a quick response, not only because of its volume, but because the glucose tends to draw fluids from the tissues into the blood vessels. The readjustment, however, is more or less temporary, unless normal saline be continued. Wakefield and Keith[13] have pointed out the occasional untoward effects of sodium chlorid in seeming to induce anuria in severe renal insufficiency of nephritis, but experiments in normal individuals have not indicated similar dangers. We have not resorted to so-called venoclysis, nor have we been fearful of heart strain. Experiments on both man and animals (MacFee and Baldridge), relative to blood dilution and arterial pressure, indicate that both the volume and rate of flow of infused fluids may be greatly increased without fear of overloading the circulatory mechanism. Boycott injected normal rabbits with Ringer's solution, equivalent to the animal's blood volume in five minutes, and estimated that at the end of the injection 67 per cent of the infusion had passed from the blood into the tissues. In man, with a heart rate of 85 per minute, it is estimated that the load resulting from infusion at 2,000 cubic centimeters per hour is 0.5 to 1 cubic centimeter per systole. However, in patients who exhibit evidences of cardiac failure, we administer infusions more cautiously, using 500 cubic centimeters three or four times a day, preferably. We have never felt that the infusion was responsible for any added strain on the heart; in fact, in failing circulation due to pneumonia, we have felt that the heart was improved.

Coones[14] has just published the results of his experiments, which indicate that, as anhydremia develops and blood pressure approaches a critical level—in man this level may not be far below 90 millimeters of mercury—a true uncompensated acidosis ensues, and that unless this can be reversed a vicious circle is set up with fatal results. In their experiments they found that intravenous administration of as little as 50 cubic centimeters of 5 per cent solution of sodium bicarbonate is followed by striking improvement in blood pressure, pulse, and respiration. The effect, however, is transient, and the treatment must be given frequently, or by continuous drip, until the balance of circulation has been restored. Since the publication of this work, opportunity has not offered to carry out the suggested method; but we believe it may advantageously be added to the steps here described.

SUMMARY

The mechanics of kidney function are briefly outlined and the rôle of circulatory pressure therein is discussed. A type of medical and surgical shock is described, together with its bearing in suppressing kidney function, with resultant uremic intoxication. Cases are cited and an outline of treatment on physiologic grounds is suggested.

1904 Franklin Street.

REFERENCES

1. Foster, N. B.: Uremia, Arch. Int. Med., 15:367, 1915.

2. Wright, S.: Applied Physiology, p. 503. Oxford Press, 1932.

3. Atchley, D. W.: Medical Shock, J. A. M. A., 95:6 (Aug. 9), 1930.

4. MacFee, W. F., and Baldridge, R. R.: Physiological Considerations Related to the Infusion Treatment of Shock, Ann. Surg. 100:266 (Aug.), 1934.

5. Rogers, L.: Philippine Jour. Sci., 4:90, 1909.

6. Atchley, D. W., and Loeb, R. F.: Dehydration and Medical Shock, N. A. Med. Clin., 17:1379 (March), 1934.

7. Coller, F. A., and Maddock, W. G.: Dehydration Attendant on Surgical Operations, J. A. M. A., 99:875 (Sept. 10), 1932.

8. Freeman, N. E.: Decrease in Blood Volume After Prolonged Hyperactivity of the Sympathetic Nervous System, Am. J. Physical, 103:185 (Jan.), 1933.

9. Evans, T. S.: Azotemia with Normal Kidneys Found at Post-Mortem, Arch. Int. Med., 48:1231 (Dec.), 1931.

10. Steinberg, C. L.: Serial Nonprotein Nitrogen Studies and Their Prognostic Significance in Acute Coronary Disease," Am. Jour. Med. Sci., 186:373 (Sept.), 1933.

11. Idem: Prognosis of Coronary Thrombosis Based on the Nonprotein Nitrogen in the Blood, Jour. Lab. and Clin. Med., Vol. 20, No. 3, p. 279 (Dec.), 1934.

12. Derow, H. A.: Significance of Postoperative Rise of Blood Nonprotein Nitrogen, New Enland Jour. Med., Vol. 212, No. 12, p. 509 (March 21), 1935.

13. Wakefield, E. G., and Keith, N.: Severe Renal Insufficiency—Untoward Effects of Intravenous Administration of Sodium Chlorid, Arch. Int. Med., Vol. 49, No. 1, p. 165 (Jan.), 1932.

14. Coones, Foisie, Robertson and Aufiance: Traumatic and Hemorrhagic Shock, Experimental and Clinical Study, New Eng. Jour. Med., Vol. 212, No. 16, p. 647 (April 11), 1935.

DISCUSSION

JOHN C. RUDDOCK, M.D. (1930 Wilshire Boulevard, Los Angeles).—Doctor Alexander calls our attention to, and offers an explanation of a phenomenon that has occurred many times in the experience of all of us, namely, the development of uremic symptoms following injury. His experience has been, and he cites cases to the effect, that the uremia as noticed is associated with a hypotension.

We must keep in mind, however, that there are other conditions associated with hypotension that do not produce the picture described by him, namely, long-continued sepsis, diabetic coma, Addison's disease, endocrine disturbances such as myxedema, infantilism and cachexia, and disturbances of the pituitary, adrenals and gonads.

Hypotension is not a disease. However, it is true that it is, in many instances, part and parcel of a diseased bodily state, and may be compatible with perfect health. With a hypotension established of 100 millimeters of mercury or less, we find it normally in approximately 3.5 per cent of all persons examined. In the opinion of insurance

medical experts, the low-blood blood pressure adds to, rather than detracts from the normal life expectancies.

It is true there are certain factors which maintain normal pressure:

1. Force of cardiac contraction.
2. Condition of the vessel walls.
3. The peripheral resistance to the blood stream.

In case of shock, several of these factors may be affected:

1. Loss of blood.
2. A decrease in the blood volume.
3. The efficiency of the heart may be impaired by a lowered-pulse pressure.

It has been established previously that trauma, operations and the use of anesthetic, especially local, increases the urea content of the blood. Hypotension aggravates a condition which is present, namely, an increase of the urea content of the blood, by reducing the excretory rate by the kidneys. It is a known fact that not over 2 per cent urea is excreted in the urine. We, therefore, have the same picture that the urologists describe as urostasis. This spoils the filter, and by decrease of the urine output the urea condition of the blood is increased and, unless relieved, uremia is impending. The rationale of treatment, therefore, would be to increase the urine output. This is accomplished by increasing the fluid intake by subcutaneous and intravenous route.

Doctor Alexander has very clearly brought out these points, which I have stressed, when he states under treatment that we must increase the volume of urine in order to excrete from the blood the excess of urea content and avoid the uremic picture, which will be the end-result in case this is not accomplished.

❋

Thomas Addis, M. D. (Stanford University Medical School, San Francisco).—This paper by Doctor Alexander touches on one of the medical emergencies which every practitioner has to meet, and must know how to treat. But does it make for perception of the essence of the situation in shock to describe it as the uremia of circulatory failure? For, whereas the word "uremia" has commonly been used to designate a failure of renal function due to disease of the kidney, Doctor Alexander shows very clearly that in this uremia the kidneys are normal; and while the term "circulatory failure" is correct, it is, after all, a failure not conditioned by any disease of the circulatory system itself, but one secondary to displacements of fluid within the body. But these are academic points which do not affect the vital substance of this paper, *i. e.*, its insistence on an early and energetic endeavor to replenish the fluids within the vessels. Whether we believe that it is the failure of the kidneys or the circulation, or take the view that these failures are secondary to nervous system failures, does not alter the fact that, from an empirical point of view, the therapeutic procedures suggested in this paper are those which have been found to be truly life-saving.

❋

Fletcher Taylor, M. D. (400 Twenty-Ninth Street, Oakland).—The clinical problem presented by Doctor Alexander is ultimately that of providing a medium which will make a living cell continue to live. This problem has both quantitative and qualitative aspects. There must be enough quantity of the medium about the cell, and it must be of the right quality. As the author and other discussers have said, the problem is best translated into clinical terms under the word "shock"; and a patient who has loss of strength, drop in blood pressure and rise in pulse rate, is less than normally alive by reason of a state of shock. Doctor Addis reminds me that not only may kidney tissue suffer under these conditions, but also other body tissues, such as nerve- and heart-muscle tissue.

The measures suggested by Doctor Alexander are useful under these conditions. Let us not, however, be enthusiastic to the point of using corrective measures which are too drastic. It is well that Doctor Alexander does not leave us with stereotyped rules to follow. The amounts of water, salt, and glucose must depend upon individual judgment of the individual patient.

❋

Doctor Alexander (Closing).—Truly, hypotension is not a disease: it is but an expression of disturbed mechanism. In and of itself it is of no vital importance, though it must be admitted that maintained pressures greatly below 100 millimeters are not compatible with health and well-being, and the influence upon kidney function is often quite clear, as in orthostatic hypotension, where the rate of urinary output is greater during the night, because then pressure assumes a higher level than during the day. But as was stated there is apparently a considerable latitude of functional adjustment to alterations in pressure, provided the changes are not too extensive in the rate and degree of departure from the established normal for the individual.

The purpose of this paper was to point out that, in addition to the familiar surgical shock which supervenes upon trauma, there occurs at times in surgery and often in medicine a more insidious shock, often considerably delayed, but probably exhibiting the same underlying mechanism, that is, "an acute disparity between the circulating blood volume and the functioning capacity of the vascular bed." As a result of this, circulatory failure hypotension ensues, closely followed by a suppression of renal output and increasing azotemia. These two run fairly closely hand in hand and, if observed, may be reversed by restoring proper fluid balance and hydrogen ion concentration. The fundamental consideration is, apparently, the depletion of fluids and electrolytes to the point at which an uncompensated acidosis develops. In the condition described, hypotension cannot be considered in an etiologic relationship except as it bears upon kidney function. It is rather a tangible result of the more obscure mechanism of shock.

Doctor Ruddock has correctly pointed out the favorable relationship of constitutional hypotension to longevity, and he has added several pathologic conditions in which hypotension is a feature. Of these conditions certain ones involve no disturbance of the water-electrolyte balance, and in these there is little tendency to uremia; but in those which do involve such disturbances—for example, sepsis, diabetic coma, the acute episodes of Addison's disease, pneumonia, and other acute febrile illnesses, perhaps because attention is so concentrated upon the primary disorder—the nitrogen retention is not studied. However, as we have observed these patients, we have not infrequently seen a sharp decline in urinary output, and azotemia develop in close association with hypotension; and we are convinced that these developments increase the gravity of prognosis.

We appreciate, with Doctor Addis, that the "circulatory failure" involved is not conditioned by any disease of the cardiovascular system, but is, on the contrary, secondary to a more obscure disturbance. What we hoped to emphasize is that the circulatory change is often a very definite indicator, a signal of a grave complication, and that, corollary to the circulatory failure, there is evidence of renal failure—at least as connoted by nitrogen retention and failing urinary output.

The will keeps our feet on an ascending trail. Knowledge meanwhile accumulates facts. Understanding correlates them. Wisdom simplifies them. Truth is told at last in monosyllables.

The word "scholar" is derived from a root meaning "leisure." One to whom that name belongs works best in quietude. Deliberation, abhorring pressure and speed, can go only at its own pace. Haste is passed at the goal by the crutch of time.—Leon J. Richardson.

He whose blood is red, whose muscles are hard, whose sleep is sound, whose digestion is good, whose posture is erect, whose nerves are steady, has a good bank account in life—he possesses that which contributes to happiness, to accomplishment, to service, to society, to state and to country.—Calvin Kendall.

THE LURE OF MEDICAL HISTORY†

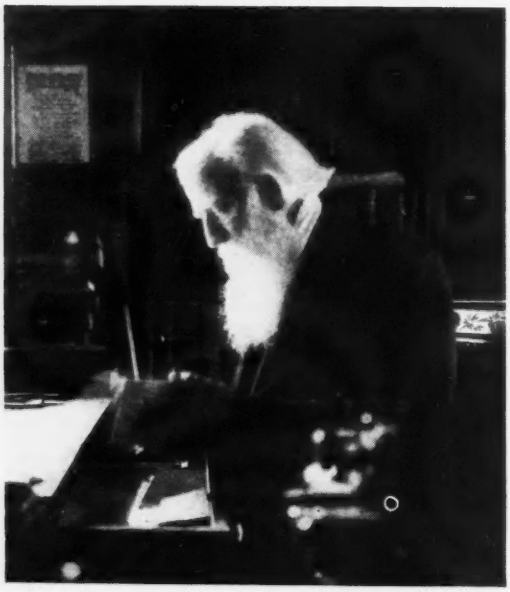
JOSEPH POMEROY WIDNEY, A.M., M.D., D.D., LL.D.

FOUNDER OF THE LOS ANGELES COUNTY MEDICAL ASSOCIATION AND OF THE COLLEGE OF MEDICINE OF THE UNIVERSITY OF SOUTHERN CALIFORNIA, CIVIC WORKER AND AUTHOR: SOME BIOGRAPHICAL NOTES ON A COLLEAGUE, WHO, AT THE AGE OF 95, STILL "CARRIES ON"

By E. T. W.

PART II*

WORK OF JUDGE R. M. AND DR. JOSEPH P. WIDNEY IN THE ESTABLISHMENT OF THE UNIVERSITY OF SOUTHERN CALIFORNIA, AND ITS COLLEGE OF MEDICINE



JOSEPH P. WIDNEY, M.D.
From a photograph, taken in his library.

THE distinguished brothers, Judge R. M. and Dr. J. P. Widney, acting on a suggestion from the former, having with others taken the initiative to found an institution of higher learning in Los Angeles, the State, in 1880, granted a charter for the University of Southern California; and five years later, the board of trustees empowered Doctor Widney to take steps toward the organization of a medical department of the university. The Doctor, therefore, on March 31, 1885, called together at his office in the Widney Building (erected in 1883, on First Street, on land now a part of the new City Hall ground), the first faculty, and formally established "The College of Medicine of the University of Southern California." Doctor Widney was elected dean of the faculty; and for ten years he filled that office, at the same time occupying the chairs of theory and practice of medicine, and medical Latin.

The first session of the college was held in a brick building, long standing at 447 Aliso Street, and there the work of instruction was carried on for several years. Doctor Widney owned the property, and he still owns part of it. There were no funds available for rent, and he allowed the college to use the property rent-free for the entire period except the first few months, when a number of repairs had to be made. The building had long been the residence of Don Louis Vignes, the owner of a very extensive vineyard and a producer of famous wine, who made his home upstairs in the second and third stories, and had a basement for his business below. With the building of the proposed Union Station, some of this property will be appropriated for a new street.

From the beginning, everybody associated with the movement was enthusiastic to create a medical college "equal to any in the United States"; and when once established, it soon went beyond many others in its requirements, since elsewhere such a course usually meant practically only five or six months of work, and then a supplemental term of less earnestness and efficiency. "I was told," said Doctor Widney, " 'you will need to make the course lighter for the year in order to draw students.' 'No!' I replied, 'we will make it heavier.' I wrote to Harvard and the University of Pennsylvania, and secured their catalogues. Each was running a three-year course. Each year had nine months of work, divided into two terms—five months of solid work, and then four supplemental months, called the summer term. The work of this term was lighter and less earnest, and so was much neglected. Instead of that arrangement, we adopted and enforced a continuous term of nine months of unbroken, solid work, and this at once put the Los Angeles College in the front with the best medical schools in the United States. The result was shown in the standing of the graduates, as seen in a letter I received from a large city where some of our students had competed for positions as hospital internes. The examining board wrote to me: 'You have sent us the best-trained graduates that have ever appeared before us.' The rank of our college was thus established almost in its first year, and not in the United States alone, but in Canada as well." This was particularly gratifying to Doctor Widney, who himself had picked out his colleagues, and who, foreseeing that some day the financial needs of the institution might make it advisable to keep it free from affiliations, so held the school under his personal control that the appointment of the other professors was never confirmed by the university

† A Twenty-five Years Ago column, made up of excerpts from the official journal of the California Medical Association of twenty-five years ago, is printed in each issue of CALIFORNIA AND WESTERN MEDICINE. The column is one of the regular features of the Miscellany department, and its page number will be found on the front cover.

* Part I was printed in the April issue, on page 292.

Correction of typographical error in Part I. In the third last paragraph of the first column footnote printed on page 295 of the April issue, the year 1891 should have been 1871. The historical sketch to which reference was made was presented by the late H. Bert. Ellis in 1891.

authorities. Nine students were the first graduates, forming the Class of '88:‡ Charles P. Bagg, W. W. Beckett, Edward R. Bradley, Frank D. Bullard, H. Bert Ellis, Lula Talbot Ellis, P. J. O'Neil, W. C. Thiele, and Anthony C. Vallee. During his incumbency as dean, Doctor Widney often substituted for one or another of the professors, teaching in their absence, fortunately being able to instruct in any of the departments; and sometimes he gave as many as three one-hour lectures in succession. There was then no county hospital, and patients dependent on the county for relief were "farmed out" to the Sisters of Charity in their hospital. Free use of this hospital was had for clinical instruction, and there was also established a large free clinic at the College Building, affording all the clinical material that could be used.§

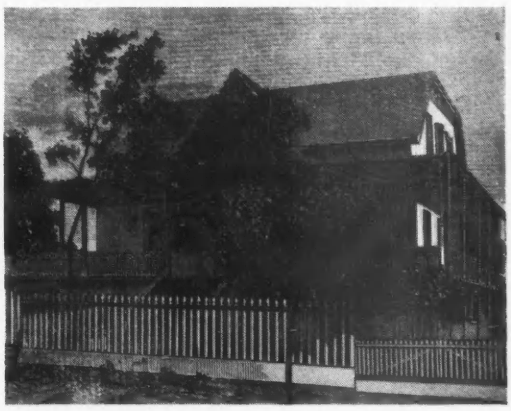


Fig. 1.—The first home (year 1885) of the College of Medicine, University of Southern California, at 445 Aliso Street, Los Angeles.

ACCEPTANCE OF THE PRESIDENCY OF THE UNIVERSITY OF SOUTHERN CALIFORNIA: PREVENTS FORECLOSURE ON THE UNIVERSITY PROPERTY

Doctor Widney remained dean until, on the death of President M. M. Bovard, the trustees of the university requested him to take the presidency, saying: "You will have to do so to save the university." He had, however, a lucrative practice, which it would be necessary to abandon, and so he said to the trustees: "Take a month to think the matter over; discuss it with the directors, and with business men of the town, and if everybody concerned is still of the same opinion, come back to me." They returned, and in their reiteration, he "recognized a call of the Lord"; he accepted the presidency, and was with the big work of construction and reconstruction for four or five years. Everything was in confusion; they were in the midst of the bank crash of '93, and no one knew what property the university had, or what it was worth. The professors had not been paid for months, and relief was not to be had through the banks, which withdrew credit. So Doctor Widney went out on the street and raised $15,000, giving his own personal security to back up the loans. Suit had already been filed to foreclose on the university property; but he

‡ Of this class, the late H. Bert. Ellis was later elected president of the California Medical Association, and for years served as one of the Board of Trustees of the American Medical Association. Dr. W. W. Beckett, still living, was also elected to the presidency of the California Medical Association, and continues in active work as chief of the medical department of the Pacific Mutual Insurance Company. The late Dr. Charles P. Bagg rose to high rank in the Medical Corps of the United States Navy.

§ Editor's Note.—By mere chance, in looking up references in the minute book of the old College of Medicine of the University of Southern California, to which he had had no occasion to refer in years, the editor came across the paragraphs which are printed below.

From the minutes of the meeting of October 12, 1896:

". . . The committee on resolutions in regard to the resignation of Dr. J. P. Widney as dean of the College, reported and were discharged.

"WHEREAS, Joseph P. Widney, A. M., M. D., LL. D., one of the founders and continuously until now the dean of the College of Medicine of the University of Southern California has retired from the practice of medicine, and owing to imperative demands on his time in other directions, has tendered his resignation as dean; now, therefore, be it

"Resolved, That we, the members of the faculty of the College of Medicine recognize that Doctor Widney has been chiefly instrumental in maintaining the high standard of our college;

"Resolved, That as a fellow teacher and practitioner, we recognize in Doctor Widney an honorable gentleman, a thorough scholar and an unselfish friend;

"Resolved, That while we yield and accept his resignation, yet we hereby tender to him the titles of Honorary Dean, and Emeritus Professor of Medicine, thus perpetuating the history of his work with us and in some small degree expressing our appreciation of the same.

"H. BERT. ELLIS, M. D.
"WALTER LINDLEY, M. D.
"WILLIAM L. WILLS, M. D."

It is interesting to note that the report presenting the resolutions when Doctor Widney resigned as dean, was signed by three members of the California Medical Association, each of whom, in his day, had been president of the California Medical Association (Dr. Walter Lindley in 1890, Dr. William LeMoyne Wills in 1896, and Dr. H. Bert. Ellis in 1904).

The two other items are of equal historic interest, because the one tells how the College of Dentistry of the University of Southern California (now one of the largest dental schools of the United States) came into existence, and the other, how the Children's Hospital of Los Angeles (one of the notable institutions of its kind in America) was founded.

* * *

From the minutes of the meeting of July 9, 1897:

". . . The subject of the establishment of a Dental Department came up and was discussed by all present. It was moved and carried that the entire matter be referred to a committee consisting of Doctors Kurtz and the Dean [Widney] with power to act."

* * *

From the minutes of the meeting of August 3, 1901:

". . . On motion of Doctor MacGowan, Doctors Brainerd and Wills were appointed a committee to investigate the founding of a Children's Hospital, and to report at some future meeting."

* * *

Of additional historical interest concerning the part taken in medical organization work in California by the College of Medicine of the University of Southern California, is the fact that up to the present time every member of the California Medical Association who was ever elected to the presidency of the California Medical Association, and who resided in the city of Los Angeles, without exception has been either a graduate or a faculty member of the College of Medicine. The names of the twelve members of the California Medical Association who have been thus honored, with the nature of their college affiliation, is given below:

* Henry S. Orme, president in 1879; faculty.
* Walter Lindley, president in 1890; faculty.
* William LeMoyne Wills, president in 1896; faculty.
* H. Bert. Ellis, president in 1904; class of 1888; graduate and faculty.
Wesley W. Beckett, president in 1909; class of 1888; graduate and faculty.
George H. Kress, president in 1917; faculty.
* Henry G. Brainerd, president in 1923; faculty.
* Granville MacGowan, president in 1925; faculty.
* William T. McArthur, president in 1927; faculty.
William H. Kiger, President in 1929; faculty.
Joseph M. King, president in 1933; class of 1895; graduate and faculty.
Clarence M. Toland, president in 1935; faculty.
Edward M. Pallette, president-elect, in 1936; class of 1898; graduate and faculty.

* Deceased.

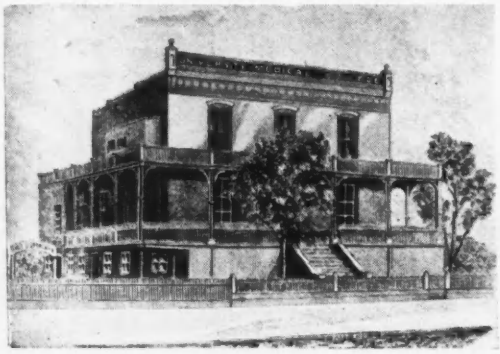


Fig. 2.—The original building of the College of Medicine of the University of Southern California (after it was remodeled in the year 1888).

paid the bills and got the suit stopped. From then on, every bill was paid when it came due, and every professor received his check at the end of each month.* Having sufficient private means that it was not necessary for him to continue practicing medicine, and not wishing to compete with the college professors maintaining such practice, Doctor Widney also discontinued active work as a physician and surgeon, and thereafter treated only a few of his personal friends. But his interest in educational work was not confined to the upbuilding of the University of Southern California; he consented to become a member of the Los Angeles Board of Education, and was president of that body for one or two terms. At the commencement of his service, there were but three school buildings in town; but with commendable foresight, he saw what was coming, secured a lot with a frontage of one hundred feet on Spring Street and running back to Broadway, between Fifth and Sixth streets (later known as Mercantile Place), and several other lots, one as far out as Brooklyn Heights. As proof of that wisdom, the Mercantile Place property eventually sold for a high price, making possible further expansion of the Los Angeles school system. As influential executive, Doctor Widney also favored the employment of a superintendent, and Dr. W. T. Lucky, an excellent pedagogue, was selected at a salary of $5,000, although that compensation was considered by many rather high for such services.

AFFILIATION OF THE MEDICAL SCHOOL WITH THE STATE UNIVERSITY

Speaking of the affiliation of the College of Medicine, of which he was the founder and guiding spirit, with the State University, as its Los Angeles Medical Department, Doctor Widney says: "When I was no longer dean of the School of Medicine, it became involved in financial troubles in trying to maintain its standards and broaden its work, and representatives of the faculty came to me; wherefore I told them what I had in mind for so long a time. At their request, I went north in company with Dean W. Jarvis Barlow and several of the professors, including Doctors H. Bert. Ellis, H. G. Brainerd and Granville MacGowan, to attend a meeting of the Regents of the University of California, and we asked that the medical school at Los Angeles be made a part of the state university system. The petition we presented was granted when the Regents agreed to take over the property of the College of Medicine and make an appropriation for its maintenance. Wishing, however, that all of our students of the past who had received degrees should also have as their alma mater the new mother, we effected in addition the provision that each graduate of the College of Medicine of the University of Southern California, duly certified by a specially appointed Alumni Committee,* should be listed as an alumnus of the University of California." This affiliation took place in the year 1909, the Los Angeles Medical Department carrying on undergraduate courses through 1914, after which time it offered courses only to medical graduates.

PROPAGANDIST FOR THE PORT OF SAN PEDRO

The practice of his medical and educational work for years demanded the major part of Doctor Widney's attention and time; but through these very activities he aided in advancing numerous important movements, and someone has well said of him that "he was a zealous promoter, for several decades, of every public enterprise in Los Angeles." And by no means alien to his interest and sympathy were the great industrial projects of the Pacific Coast. From the time, for example, when he spent several weeks at Drum Barracks on his way into Arizona from San Francisco, Doctor Widney found the harbor at Wilmington (now the inner harbor of Los Angeles) and its problem of development worthy of special study. There were only eighteen inches of water on the bar at low tide. Calling together a meeting of the merchants of Los Angeles, he placed before them a statement of what was needed, and a resolution requesting the Government to take steps for the improvement of the harbor. This was forwarded to Washington and the work was commenced.

* From a 112-page booklet entitled "Six Collegiate Decades, The Growth of Higher Education in Southern California" published in 1929 by the Security-First National Bank, are taken these interesting paragraphs:

"For three months in the winter of 1887 Los Angeles real estate sales averaged over $12,000,000 per month. Eighteen months later land could not be given away. The inescapable collapse, after the peak of the boom inflation in 1887 had passed, fell upon the infant colleges of the Southland with staggering effect. In common with Pomona and Occidental, the University of Southern California passed through a heart-breaking period of financial depression which reached its darkest days in 1893. . . .

"On December 30, 1891, President Bovard died. With finances in a precarious state and the administrative system almost completely shattered by his death, the University of Southern California faced the great crisis of its existence.

"It was a physician who proved to be the man of the hour to heal the university of these blows. Under the vigorous and cheerful leadership of Dr. J. P. Widney, a brother of the founder, the drooping spirits of faculty and students were revived. The University of Southern California reversed its policy of extension and expansion, and entered upon an earnest program of concentration and centralization." . . .

"But the idea of the university had been born several years before, in the mind of Judge Robert Maclay Widney, a pioneer of 1868. After the death of Reverend Tansey in 1876, it remained for this man to take the leading rôle in the unfolding events that made his early dream of a university in Los Angeles come true."

* The chairman of the Alumni Committee was Dr. William R. Molony, class of 1901, who for a number of years has been and still is president of the Board of Medical Examiners of the State of California.

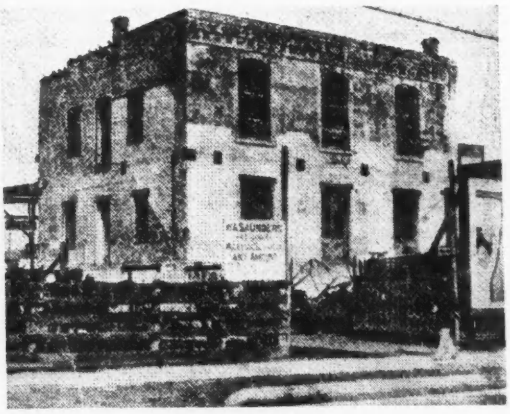


Fig. 3.—The original building of the College of Medicine of the University of Southern California (as it appeared in 1927).

The Los Angeles *Record*, December 13, 1927, printed the illustration, reproduced in Fig. 3, with comments as follows:

"Time has played a queer prank upon the old University of Southern California 'medical school,' 445 Aliso Street.

"Where once the voices of dignified professors instilled scientific knowledge in the minds of would-be physicians, the mournful 'hee-haw' of several hundred mules reverberates today.

"For more than twenty-five years the medical college building has housed the offices of W. A. Saunders' mule market—the largest in the southwest, says 'Jim' Conner, local manager.

"From these offices more than 1,500 work animals are rented over Southern California, Arizona, New Mexico, and Nevada.

"The mules are held in corrals around the building, which was built nearly a half-century ago, Conner estimates, out of brick brought to Los Angeles by sailing vessels around the Horn.

"The words, 'Medical College,' are still dimly visible above the front door of the building facing Aliso Street.

"Classrooms are now filled with mule harness. The mule market land and building are owned by Dr. J. P. Widney."

(The site of the old medical college is now a part of the grounds of the new Union Passenger Station of Los Angeles.)

Each year, too, Doctor Widney prepared papers to be placed before Congress requesting appropriations to continue the work. The depth on the bar was gradually increased to eleven feet at low tide, with an inner depth of some twenty feet. Seeing the need of a far vaster work, he wrote to Senator Leland Stanford in Washington requesting him to secure a survey appropriation for the building of a breakwater to take in the deep water of the outer roadstead. The Senator replied that he had handed the letter directly to the Secretary of War, who said that, without waiting for congressional action, he would give the required order. The survey was made and an appropriation secured for beginning the construction of the breakwater, and thus was assured the great outer harbor of Los Angeles, with fifty feet of water at low tide and no bar. This harbor, known as Port Los Angeles, now ranks second only to New York in its annual shipping.

PROPONENT OF STATE OWNERSHIP OF HARBOR TIDELANDS

Quite as interesting was Doctor Widney's association with the great fight to restrain the Huntington railroad interests from claiming the state tidelands of the harbor, under pretense that they were originally "corn land," and that the company merely wished to reclaim the marshy area as such for the benefit of the public; for again Doctor Widney's early experience as a soldier came to the rescue of what so rightfully belonged to the people. While stationed for six weeks in 1867 at Drum Barracks, before setting out for Arizona with the wagon trains, the ever-inquiring surgeon had made himself familiar with every foot of the coast there; and when the famous land case came up in court, he asked to be allowed to take the stand. He then told how the military had landed goods from lighters right up to the Quartermaster's building on the West Basin, and that there were inclined shipways (just where the railroad company located their so-called "corn land!") on which he had seen with his own eyes ocean-going vessels being repaired; and that if the judge would go down there, and pull aside the weeds, he would himself discover what was left of the shipways! And that is what a visit to the site of the old shipways revealed.

BELIEF IN GEOGRAPHICAL AND POLITICAL DIVISION OF CALIFORNIA

A man of keen perception, there is little wonder that many years ago Doctor Widney also led in a movement for political division of the State of California; and we have his own account of what, at the time, attracted wide attention, and has since been frequently debated, pro and con. "I issued a call for the meeting," he says, "which was attended by representatives of various Southern California counties, and the records of this session of two or three days are still in my possession. A committee of distinguished attorneys was appointed, and this committee reported that the State, at the time of its admission, was already practically divided, for provision was then made that, whenever the people wished it, a division of the State into two parts could be made. Notwithstanding, however, it was so provided, that no vote need be taken upon the issue, the convention decided that our movement was premature—the time was not ripe for the step. I think that the postponement was a great mistake, and I am still in favor of such a subdivision, and into four parts, according to the harbors available: (1) Southern California, which would have Los Angeles Harbor and San Diego Harbor; (2) Point Harford at San Luis Obispo (a cut through the mountains bringing the lower San Joaquin Valley to the ocean); (3) North Central California, with San Francisco Bay, and that city as the capital; and (4) another division, centering around Eureka or on Humboldt Bay. That my views are sound was confirmed by a conversation with an eminent senator from the East, who expressed the opinion that Californians, with a coast line of more than eight hundred miles, and yet allowed only two senatorial votes (or no more than are given to little Rhode Island), are very foolish in not insisting upon a redivision, and, therefore, a new and better representation. Such a division into four parts, as I proposed in the February, 1881, issue of *The Californian*, would give us eight senatorial votes; and this division will surely come—only just wait! For the same reason, I believe that the day is not so far distant when both Oregon and Washington will

insist on a similar redistribution, with the mountains dividing the east and west portions, based on the need of a fairer representation." Continuing, Doctor Widney said: "As you will recall, I founded, with Doctors Lindley and Joseph Kurtz, just about fifty years ago (or two years before I coöperated in organizing the Southern California Medical Society*), the *Southern California Practitioner*, a journal that we all thought was needed as a medium of intercourse between the members of our medical profession in the South; and during the period when I was one of the editors of the first few volumes, we touched upon this matter of a recognition of at least two Californias, and not merely one. In possibly the initial number, I wrote: 'Distance, rugged, intervening mountains, and entirely diverse commercial and industrial interests, which are making of California two separate and distinct sections, have also, in a great measure, prevented a close union of the medical profession. Southern California has developed its own intellectual life, and its own educational system; and we believe that the time has come for the establishment of its own medical journals and societies.'

BACK TO THE LAND

"However we agree or disagree on this matter of state division, a study of the conditions may lead to the focusing of attention upon another problem, the tendency for people to congregate too much in cities. Born in the backwoods, as a youth, and long before the Civil War, I helped to fell trees and clear the land and create a new civilization in the Ohio Valley. And again, in the Arcadian life of earlier California, in the sixties (when, for a while I went into the desert country), I saw the advantage of living close to the soil. Long before there was a chamber of commerce, I planned and labored for a great harbor at San Pedro—was that the work of a visionary? And am I visionary when I say that again the cry must be sounded: 'Back to the land, or perish!' I know that it is natural for people to congregate in the interests of trade, education and religion; but with such crowding and overcrowding come the greatest of problems having to do with human health and happiness. Is it not time, then, to ask whether Los Angeles and other great cities are not already big enough?—whether they should not stop packing people so closely together?"

AS AN AUTHOR

Not at all discouraged, when, in the long ago at the Piqua, Ohio, high school his essay on the question, "Is Civilization a Failure?" scared the conservative faculty—which hastened to award the grand prize to another, more orthodox student who had written upon some such subject as "The Goodness of Being Good!"—Joseph Pomeroy Widney believed in himself as one having a natural bent for literary work; and, as the years went by, he continued to prosecute such studies and exercise in connection with the practice of medicine. Possibly his earliest appearance in print of note after his arrival in California was his contribution to *The Overland Monthly* (Vol. X, January, 1873, page 44), of the article, descriptive of "The Colorado Desert," already mentioned,† in which he discussed both the possibility and the undoubted wisdom of reflooding of the dry Colorado basin; and three years later, with Don Juan Warner, of Warner's Rancho, and Judge Benjamin Hayes, founder of the Hayes Historical Collection in the Bancroft Library, he wrote and also edited the so-called "Centennial History of Los Angeles," published in 1876 by a patriotic public committee; a pioneer item, and one of the first from a Los Angeles press, considered by noted historians a real boon, and by collectors of Californiana, a treasure. Again, as previously described, he collaborated with his friend, the late Dr. Walter Lindley, in producing a very informative, illustrated guide to the "California of the South" worthy, as an introduction to the "American Italy," for comparison with the best work of Nordhoff or Ross Browne. "The Lure and the Land," later written to preserve the local color of the California he first knew; the more autobiographical "Three Americas," and the scholarly work on the "Race Life of the Aryans" (an exhaustive study alone probably justifying the conferring, by Miami University, of the honorary LL.D. degree), are only some of the more recent volumes from this author's well-stored mind and versatile pen; while "Life and Its Problems, as Seen by a Blind Man at Ninety-five," just begun, reminds one all too sadly of the great tragedy darkening the latter years of this genial, inspiring soul. A fairly complete list of Doctor Widney's publications would, therefore, include the following:

"Race Life of the Aryan Peoples," in two volumes, 698 pp., New York, 1907: Funk & Wagnalls Company.

"The Lure and the Land," 190 pp., Los Angeles, 1932: Pacific Publishing Company.

"The Genesis and Evolution of Islam and Judaeo Christianity," 238 pp., Los Angeles, 1932: Pacific Publishing Company.

"The Faith That Has Come to Me," 269 pp., Los Angeles, 1932: Pacific Publishing Company.

"Whither Away?" 152 pp., Los Angeles, 1934: Pacific Publishing Company.

"The Three Americas," 306 pp., Los Angeles, 1935: Pacific Publishing Company.

Private editions were also issued of other literary efforts, such as the three essays making up "The Way of Life," 152 pages, published in 1900; "Ahasuerus: A Race Tragedy," issued in 1915; "Via Domini," put out in 1903, and "All Fader," which appeared in 1909. From Doctor Widney's pen, too, have come a large number of pamphlets, and magazine and newspaper articles upon various topics—industrial, racial, scientific, climatic, professional, historical, political, and educational—some treating of harbor work, and national and religious issues; and he has now in press, to be issued by the same Los Angeles publishers, a volume of promise entitled, "Race Types and Race Religions."

* Note.—For many years, the Medical Society of the State of California was practically a state medical society for the region north of the Tehachapi, and the Southern California Medical Society was a similar organization, but with a more localized name, to cover the counties south of the Tehachapi.

† See April issue of CALIFORNIA AND WESTERN MEDICINE, page 295.

Reproduction of an illustration in the Los Angeles *Times* Magazine of April 19, 1936. The legend in *Times* Magazine was as follows:

"Dr. Joseph P. Widney, at 94 years of age, who, on top of a full life, developed marked musical talent after his seventieth birthday, and who has written several books following his eightieth birthday, and is still active. Under an old age pension plan he would have been retired, living on the labor of others, for the past thirty-four years."

Note.—The illustration was used in an article entitled, "Will the Aged Rule America?" by Marjorie van de Water, the opening paragraphs of the article being appended hereto as a footnote.*

A WELL-SPENT AND STILL ACTIVE LIFE

Twice married—in 1869, to Miss Ida D. Tuthill, and, after her death, in 1882 to Miss Mary Bray—and knowing, for the most part, only domestic happiness, Doctor Widney has resided for years in a stately country mansion on Washington Hill, so delightfully old-fashioned that oil lamps still furnish the only artificial illumination; near which is the Mission Bethel-El, built and maintained at the Doctor's own expense as a free "Church of the All-Father," wherein on each Sabbath morning, for many years, he has led the religious services, making more undeserved, it would seem, as it was so unexpected, the ill-fate that suddenly crossed his path and laid him low.

But let the never-faltering octogenarian tell of the terrible incident in his own words of simple fortitude: "In the year 1929 an automobile accident left me with a fractured skull, fracture of the cervical spine, several broken ribs and some injuries of the skull, leading to blindness and defective hearing, with severe and continuous pain about the base of the skull which, even yet, has hardly ceased. Nevertheless, during this time I have done much of my heaviest, literary work, besides attending to general business and church duties. But even blindness and physical disability have their compensations. The long hours of darkness and of enforced silence give time for reflection and a careful review of life, its activities, and of the mighty past of the ages which, otherwise, would have been missed. Much that I have written in the books of these later years might never have been carefully thought out, and for even this blindness and silence I have learned to thank God. It was part of the schooling. His will be done! *Etiam Domine, Ad Te levabo oculos caecos!*"

* "Will the government budgets and tax programs of the future be dictated by an old age lobby?

"Will the United States be run by men and women past the retirement age, who hold power by their clutch on the purse-strings of the nation?

"Will the old-age pension, started as means of lifting the dark shadows of poverty from the twilight days of America's aged, prove to be an 'Old Man of the Sea,' growing into a crushing burden on the backs of the producers of the nation?

"These are some of the questions raised by new predictions based on statistics of the population.". . . .

CLINICAL NOTES AND CASE REPORTS

METHEMOGLOBINEMIA

RESULTING FROM ADMINISTRATION OF BISMUTH SUBNITRATE

By J. S. Hayhurst, M.D.
Redlands

THE possibility of producing methemoglobinemia in children, through the administration of bismuth subnitrate, has frequently been pointed out. Harold E. Roe,[1] with a forceful article, brought particular attention to this point in connection with the common use of this drug in treating the diarrheas of infants and children. Most practitioners realize the possibility of producing a condition of methemoglobinemia with acetanilid or acetphenetidin, but they are still overlooking bismuth subnitrate. Since it is the nitrate radicle that is injurious, and since bismuth subcarbonate is just as effective, the latter drug should be employed.

REPORT OF CASE

A one-year-old female Mexican child was seen at 2:30 p. m. on July 23, 1935, because of cyanosis, air hunger, and a feeling of impending death in the mind of the mother. The brief history elicited at first revealed that the child had not been ill, but had been put to bed for its usual nap at about 11 a. m. On the child's awaking, the mother noted this frightening condition; the pulse rate was too rapid to count. Even with the stethoscope, the examiner could only guess at a rate of 200; respiration rate was 50 to 60; temperature, 99.4 R; hurried examination of the chest revealed no abnormal sounds. The mother was then queried with reference to administering some type of medicine, and she admitted having given the child a teaspoonful of bismuth at about 10 a. m., because of "mucus in the throat." Later it was learned from the druggist who sold the drug that it was straight bismuth subnitrate. A diagnosis of methemoglobinemia was made, and the child taken to the hospital and put into an oxygen tent. The intestinal tract was emptied with enemata and saline cathartics, while the child was given oxygen. She improved considerably in a few minutes, so that at 3:30 p. m. her pulse was countable at 160, and respirations 44. Blood examination at entry yielded a 12 per cent methemoglobin content by colorimetric method. This determination was done quickly, using the materials we had at hand, and there is some doubt as to the accuracy of the percentage. By 7:30 p. m. the pulse rate had dropped to 134 and respirations to 34; at 11 p. m. the findings were 128 and 26. At 11:40 p. m. the child had returned to a normal appearance, so that she was removed from the oxygen tent. She was discharged from the hospital the following morning, and has remained well to date.

Medical Arts Building.

1 Roe, Harold E.: Methemoglobinemia, Following Administration of Bismuth Subnitrate, J. A. M. A., 101:5, p. 352 (July), 1933.

THE OCCLUSIVE DRESSING IN THE TREATMENT OF IMPETIGO CONTAGIOSA

By FRANKLIN I. BALL, M.D.
Los Angeles

A RECENT article gave the results of the treatment of impetigo contagiosa by means of the already well-recognized principle of the occlusive dressing.

As all must agree, of all skin diseases impetigo contagiosa must be given the premier position, not only for its highly infectious and contagious nature, but also for its widespread development in all ages and classes of patients. Because of these qualities, it is the cause of great economic consequence: among adults, in loss of working time and the cost of medical care; and among children, in the loss of school attendance.

The many remedies advanced for the treatment of this condition is strong evidence that none have been found to be entirely satisfactory. It is for this and the above reasons that any form of treatment, which is more efficient and effective than the existing methods, is indeed to be welcomed and given serious consideration.

As brought to my attention by the representatives of a commercial organization whose product is an elastoplastic appliance, well suited to requirements for an occlusive dressing; J. L. Newman,[1] in 1933, reported his treatment of fifty cases of impetigo with occlusive dressings alone. These results are summarized as follows:

Fifty cases were treated from first to last with this method. Total time lost was 486 days, giving an average of 9.7 days required for a cure per case. The longest time required was nineteen days; the shortest, five days. One case formed a subcutaneous abscess.

The technique of treatment was the application of the flexible, elastic, adhesive, cut to a well-fitting size and shape, covering the lesion well beyond its borders. The lesion was not touched in any other way. Crusts, if present, were left *in situ;* superficial pustules were not opened and the adjacent skin was not cleansed. Some selection of patients had to be employed. There were situations, such as lip edges, where no dressing could be conveniently applied, also where certain patients could not be trusted to leave their dressings alone.

Feeling that the results reported by Newman were encouraging enough to warrant a trial, and following his technique in general agreement and with only minor material changes, a series of patients were placed under treatment with occlusive dressings, of which a total of sixty-four cases were followed to completion and are herein reported.

Of the sixty-four cases thus treated, it is to be noted (see Table 1) that the total number of days to cure all cases was 737, which gives an average of eleven and five-tenths days for cure per case; that one case required twenty-three days' time for a cure; that three cases required three days for a cure, and that twenty-six cases (40.6 per cent) were cured in eight days or less; while twenty-two cases (34.3 per cent) required from fourteen to twenty-three days to be cured. No subcutaneous abscesses were formed in any of these cases.

TABLE 1.—*Results of Treatment in Sixty-four Cases Treated with Elastoplastic Occlusive Dressings*

Number of days to cure	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Number of cases	4	3	4	4	4	7	2	6	1	5	2	3	0	4	
Number of days to cure	17	18	19	20	21	22	23								
Number of cases	2	3	3	1	4	1	1								

Total number of cases, 64.
Total number of days to cure, 737.
Average number of days to cure, 11.5.
Patients cured in eight days or less, 26 (40.6%).
Patients cured in fourteen days or more, 22 (34.3%).

COMMENT

A study of these resultant figures shows comparable agreement with those of Newman's previous report. It was of notable interest to the author to observe that one group of cases obtained a considerably shorter cure than did another group. A recheck of the cases in two groups brought out the fact that in most of the cases in the former group the lesions were small in size, less severe in character, and the patient had begun treatment early in the development of the lesion, whereas in the latter group it was found that the lesions were large, severe in nature and of long duration. In these latter cases it became usual to observe that, because of the sizes of the lesions and the angular or curved surfaces to be covered, the elastoplastic adhesive dressings became impracticable to apply. During the progression of the treatment of the cases, the observation of the limitation of the spread of exudative secretions from one site to another on the patient's skin, and the seemingly resultant limitation of the spread and development of new lesions on the patient's skin and the skins of other members of a patient's household, inclined toward the belief in the principle of occlusion and non-interference in the treatment of simpler cases of impetigo contagiosa.

CONCLUSIONS

1. Sixty-four cases of impetigo contagiosa treated by occlusive dressings are reported in which twenty-six (40.6 per cent) were cured in less than eight days, twenty-two (34.3 per cent) were cured in from fourteen to twenty-three days, while the average number of days required to cure a case was eleven and five-tenths days.

2. These results evidence considerable advantage in the use of occlusive dressing in cases of impetigo contagiosa in which the lesions were practicable of application of such dressings.

3. Recommendation for the use of occlusive dressing is made wherever the instances occur in which these applications are practicable.

6253 Hollywood Boulevard.

1 Newman, J. L.: Brit. Med. Journal, 1:823-824 (May 13), 1933.

BEDSIDE MEDICINE FOR BEDSIDE DOCTORS

An Open Forum for brief discussions of the workaday problems of the bedside doctor. Suggestions of subjects for discussions invited.

ECLAMPSIA

ETIOLOGY

J. Carl Cummings, M.D. (202 Professional Building, Glendale).—Eclampsia may be defined as a culmination of a toxemia occurring in a pregnant woman, and usually accompanied by convulsions.

Convulsions not necessarily are the accompaniment of the eclamptic state, as inhibited cases of eclampsia have occurred in which convulsions were absent; and it is possible for convulsions to occur in pregnancy parturition, or the puerperium, and they may be due to other causes than eclampsia.

An interesting sidelight on the incidence of eclampsia in Vienna was written by Dr. Walter Schiller of the Kermanner Clinic, that during the years from 1914 to 1919, or over a five-year period in which more than 35,000 cases were delivered at the Kermanner Hospital in Vienna, there was not one case of eclampsia recorded. During this five-year period the patients were without meat of any form, except soup which was prepared from human bones from the soldiers which were slain on the battlefields of the Great War. He also stated that they had many cases of eclampsia following the five-year period and many previous to the five-year period.

Pituitary as an Etiologic Factor. — Theobold states that the syndrome of eclampsia could not be explained by postpituitary hyperfunction of the posterior lobe of the hypophysis. Moreover, the hypophysis leaves unexplained the fact that the patient suffering either from the nephropathy of pregnancy, or from eclampsia, almost invariably suffers from a true retention of chlorid and constipation. . . .

At the International Congress (1913), H. Tweedy suggested that ordinary food became poisonous during pregnancy; and when in this condition it gives rise to toxemia and eclampsia. He was led to such conclusion by noting the recurrence of fits in women who had partaken of food even in small quantities. It was evident that the bad effect was not produced as a result of decomposition or irritation within the intestines, for it followed very rapidly after ingestion.

He now explains how pregnancy acts as a contributing cause: The antibodies in the blood not only guard against pathogenic bacteria, but also deal with food particles after they have entered the blood, and are thus concerned in the later processes of digestion. Badly developed or absent in the new-born, they soon become active, stimulated by an antigen richly present in colustrum and the early food. Though far in excess of normal requirements, they are not unlimited. This is proved by the sickness which may follow ingestion of some unwholesome article of food or drink, and such dissimilar complaints as migraine, epilepsy, and chronic Bright's disease, will probably be found to depend on a deficient antibody reaction.

The antibodies during pregnancy are called on to fulfill a double rôle besides their normal work; they are compelled to deal with the albumin which is constantly exuding into the maternal blood from the ovum. The presence of the ovum protein is abundantly proved by the Abderhalden test, and the effect of this toxin is noted through all the degrees of toxemia. . . .

Eclampsia viewed from the above standpoint is seen to be as certain in its etiology as any other medical complaint, for the theory is in accordance with every fact known to the practical obstetrician. . . .

It is the belief of B. C. Hirst that the origin of the toxins of eclampsia is mainly in the fetal body, and to a less extent in the placenta. He states that the adult body has enough to do to take care of the incineration, oxidation and elimination of the products of its life processes. When the waste products of the fetus and the placenta must be taken care of, it is no wonder that overburdened organs break down. This is all the more likely when a heavy protein diet and inactive and sluggish bowels increase the work.

W. Poten does not believe that the cause of eclampsia lies in the placenta, because, aside from eclampsia which occurs in the puerperium, it is hard to explain why the mother and not the child should be affected by an organ which nourishes the latter. Against the theory that a toxin is the cause of eclampsia, stands the fact that so many eclamptic patients recover with remarkable rapidity. . . .

In 1914, Young suggested that the poison was elaborated during the early disintegration of a piece of placenta whose blood supply had been cut off. . . .

Symptoms.—The writer's experience in eclampsia cases occurred between the eighth and ninth month of gestation, and the signs and symptoms of preëclamptic toxemia were recorded between the fifth and seventh month of gestation.

The symptoms preceding the toxemia are albuminuria, and usually increased systolic blood pressure, slight edema, headaches, jaundice, flatulence and epigastric pains. Later symptoms are excruciating headaches, marked edema, twitching of the muscles of the arms and legs, epigastric pains of a violent character, albuminuric retinitis, convulsions, and coma.

Increasing percentage of nonprotein nitrogen retention in the blood stream is certainly an index as to the severity of the eclampsia. . . .

The persistence of deep breathing after convulsions is a sign of persisting intoxication, and the appearance of dyspnea is a very unfavorable prognostic sign.

Constitutional Peculiarities in Eclampsia.—In eclamptic patients certain constitutional characteristics are found, namely: small stature, large pelvis, and great body weight. The majority of eclamptic patients are young, and about 50 per cent are not over twenty-five years of age. . . .

* * *

PATHOLOGY OF ECLAMPSIA

DANIEL G. MORTON, M.D. (University of California Medical School, San Francisco). — The changes produced in the body by eclampsia are numerous. Many of them have been considered as the responsible factor in the production of the disease: first, the changes in the kidney were incriminated, later the liver necroses were considered as the etiologic factor, and more recently, the disease has been attributed to changes in the posterior portion of the pituitary gland. The truth of the matter is that the etiology still remains obscure, no proof ever having been obtained that the changes in any one organ are responsible. Gradually the conception that the pathologic findings in the various organs are *all* due to some toxic agent circulating in the blood has gained ground. At the present time, this is the most universally held view. The nature of the toxic agent we do not know, but there is increasing evidence to show that it is one or several split proteins fractions, possibly coming from breakdown of placental tissue. A discussion of the etiology of the disease appears elsewhere. I merely want to make clear here the conception which most rationally explains the pathologic findings in women dying of eclampsia, namely, that the various metabolic and structural changes observed constitute a series of events first set up by the circulation of a toxic agent in the maternal blood. All structural changes may not be directly due to this poison; many may be secondary to aberrations in metabolism and function first set up in other organs by the toxic agent. For example, the toxin may increase the permeability of capillaries, which in turn may lead to thromboses and, thus infarcted, necrotic areas, which may in turn seriously alter the function of the particular organs in which they have occurred.

Death from eclampsia may result in a variety of ways. There may be cerebral hemorrhage, or fatal hemorrhage from other organs. There may be marked cerebral edema, a "wet brain," so that the function of the vital centers is interfered with; or there may be such marked pulmonary edema that death results from asphyxia. Death may be due to marked cardiac damage in the form of thromboses and consequent necroses, or death may be essentially a uremic one because of extensive renal necroses. Thus, there is no characteristic cause of death. Generalized edema is common, as are effusions into the various body cavities. Hemorrhages and thromboses are common, may be found anywhere, as in the skin, eye, brain, heart, liver, lungs, kidneys, adrenals, etc. The blood is dark and does not clot readily. The widespread extent of hemorrhages and edema, with consequent necroses, suggests a marked increase in capillary permeability, and in the make-up of the blood itself, so that it more easily escapes from its vessels.

The most characteristic pathologic findings in women dying of eclampsia are located in the liver and kidneys, though definite alterations are usually found in the brain, heart and lungs also.

Liver.—On gross examination, the liver surface may present irregular hemorrhagic areas, giving to it a mottled appearance. On section, patches of light and dark may be seen. Microscopically, the mottled appearance is seen to be due to necrotic areas characteristically situated at the periphery of the individual lobules. These areas may contain blood cells, or may be so necrotic that structural components cannot be distinguished. In some instances, there may be a general autolysis of liver cells. The necroses were thought by Schmorl to be due to degenerative changes following thromboses of the smaller portal vessels. He, as well as many subsequent observers, such as Williams and Opie, have considered these areas of perilobular necrosis as characteristic of eclampsia. Schmorl found them in seventy-one of seventy-three autopsies, and Williams has found them in every case he has examined. The modern view is that, when present, they are characteristic, but that they are not always present. The extent of the pathologic process in the liver cannot be related to the number of convulsions which the patient had before death.

Kidney.—The kidneys are usually normal in size, anemic, may present punctate ecchymoses. The capsule is not adherent. The extent of the pathologic process varies—in some it is very marked, in others, slight. The findings are degenerative changes in the epithelial lining of tubules and of vessels. Cells are swollen, disintegrated. There is cloudy swelling and often fatty degeneration. Thromboses of glomerular vessels are common. Renal changes of some degree were found by Prutz in 361 of 368 autopsies, and by Schmorl in all but one of seventy-three autopsies. In 139 autopsies, Pollack found kidney involvement in 98 per cent. Some of the earlier observers considered the renal changes as characteristic and causative. This view has been abandoned because the lesions are often of such small extent.

Dilatation of ureters and kidney pelves, pyelitis and cystitis have often been found and, indeed, death has been attributed to the latter; but these findings are usually of secondary importance.

Brain.—Edema, areas of softening and necrosis, and thrombosis of smaller vessels are the lesions commonly found in the brain. Few are without any findings. Schmorl found thrombosis and softening in fifty-eight of sixty-five autopsies, while Prutz noted edema and hyperemia in every second or third case. Apoplexy has been described in a number of instances. To the brain changes have been ascribed the convulsions which are so commonly a part of the disease.

Heart.—The heart chambers are likely to be filled with dark, viscous blood which does not clot readily. Thrombosed vessels, necrotic areas, areas of fatty degeneration, may be found.

Lungs.—There is usually marked edema and congestion. Hemorrhage and thrombosis of the smaller vessels are common findings. Pneumonia due to aspiration of material is occasionally a prominent feature. Giant cells may be found in the lung capillaries. These cells are thought to be placental in origin, and at one time the deportation of placental elements in the maternal circulation was held responsible for the disease. However, since this has often been demonstrated in pregnant women dying of some other condition, the phenomenon has lost significance as an etiologic factor.

Eyes.—Edema, more or less diffuse retinal hemorrhage, and occasionally detachment of the retina have been described. The latter condition is thought to occur during convulsions.

Placenta.—Red infarction of the placenta of considerable extent has often been found. Indeed, it is thought by many that infarction of the placenta with the absorption in the maternal circulation of the resultant protein split products is the primary cause of the disease. However, infarction of severe degree is not infrequently found in the absence of toxemia. For these reasons it is felt by many others that infarction, like all the other lesions found, is a result, not the cause of the toxemia.

* * *

TREATMENT OF ECLAMPSIA

EMIL J. KRAHULIK, M. D. (1680 North Vine Street, Los Angeles).—When a patient develops convulsions during pregnancy, she becomes a problem of major importance. The diagnosis of eclampsia may be readily confirmed by finding albumin in a catheterized specimen of urine, and an elevated blood pressure.

Once a convulsion has occurred the preconvulsion classification is of little importance, as the general management is the same for all groups. The treatment may be considered under three heads: (1) Sedation. (2) Reduction of toxemia. (3) Termination of the pregnancy.

Sedation.—It is absolutely imperative that the patient be in a darkened room, with a nurse constantly in attendance. Exciting stimuli must be minimized, especially noises, visitors, examinations, treatments, etc.

In the Los Angeles General Hospital, magnesium sulphate intravenously continues to give satisfactory results. Twenty cubic centimeters of a 10 per cent solution is given intravenously every hour for three doses, and thereafter every four hours, if the blood pressure continues above 150, or after each convulsion if they are occurring more frequently.

When the convulsions recur at intervals of one hour or less, the magnesium sulphate may not seem adequate, and morphin, grain one-quarter, should be given hypodermically in addition. The morphin should be repeated if another interval is shorter than one hour. Morphin will not have much, if any, effect on urinary secretion, as is sometimes feared. Concurrently with the magnesium sulphate and morphin one of the barbiturates might be given at regular intervals to promote general relaxation (sodium amytal, three grains, or nembutal, one and one-half grains, every four hours). If the patient is unconscious, a double dose may be given in a rectal suppository every six hours.

Occasionally convulsions will continue to recur in spite of sedation, and the disease seems to be out of control. Sometimes we shall find that the patient is in labor, and that will precipitate convulsions. If this exciting item is not present and the convulsions continue to recur, the situation becomes more tense. For such situations a phlebotomy is suggested. This should be postponed until one is ready to withdraw enough blood to bring the blood pressure to about 100 systolic (approximately 1,000 cubic centimeters).

Reduction of Toxemia.—Efforts to increase elimination by gastric lavage and high colonic irrigation are, at best, of doubtful value. Too often convulsions are precipitated by these procedures. Diluting the toxins with fluids and increasing the urinary output are desirable.

When the convulsions seem to be under control, if the patient is not too restless, dextrose solution may be given intravenously. If much edema is present, 300 cubic centimeters of a 25 per cent solution is given; but if the edema is not marked, a larger quantity (700 to 1,000 cubic centimeters) of a 10 per cent solution is preferred. It must be given slowly so as not to embarrass a heart already under strain. The dextrose solution should be repeated at eight-hour intervals. In the absence of blood chlorid determinations, the third flask should be combined with normal salt solution.

After consciousness has been regained, water and alkaline drinks may be offered by mouth.

Termination of Pregnancy.—The mortality rate in eclampsia has declined steadily since delivery by accouchement force was discontinued. A patient cannot stand the strain of the convulsions plus the shock of a mutilating delivery. When the patient has passed the crest of the toxemia, as evidenced by the cessation of convulsions, return of consciousness, urinary secretion, and a normal pulse rate, termination of the pregnancy may be considered. It becomes imperative when the blood pressure begins to climb, suggesting a return of the eclamptic state.

Induction of labor may be attempted by giving two ounces of castor oil. Some caution against the use of quinin in eclampsia. A hot enema is given four hours after the oil. Then, if the cervix is soft, effaced, and partly dilated, the patient may be taken to the delivery room and the bag of waters broken, allowing some of the fluid to escape. Some observers claim beneficial effects for the eclampsia, and induction will be more prompt. Rupture of the bag of waters is followed by intra-

nasal application of pitocin (one-half cubic centimeter), which is removed as soon as contractions are initiated. If the cervix is firm and not dilated, there may be some uncertainty about labor starting promptly, and it may be wiser to apply pitocin intranasally without rupturing the bag of waters.

Many prefer to induce labor by using a Voorhees bag. In a multipara, it can be inserted very easily, often without any anesthesia, and usually starts labor promptly. In a primipara with a firm cervix, bag induction is discouraged. In the primipara it will prove wiser to continue observation until the cervix has softened; but if in the meantime the blood pressure begins to rise, delivery may be effected by cesarean section under local, spinal or gas anesthesia.

Labor should be made as comfortable as possible without interfering with the dilatation of the cervix. The second stage should be terminated with forceps, as the bearing down effort might precipitate additional convulsions or a cerebral hemorrhage. Convulsions have been induced by expressing the placenta when the patient was not asleep.

Postpartum Management.—Because the convulsions have been controlled and the baby safely delivered, our duty to the patient has not been fulfilled. Considerable damage to the kidneys and other organs has taken place, and opportunity must be allowed for regeneration.

Complete physical rest must be permitted until the blood pressure has returned to normal, and the albumin has disappeared from the urine. More efficient kidney rest is procured when the patient remains on a diet of milk and fruit juices for about one week, or longer if the albumin persists. Then articles high in carbohydrate may be added, and later fruits and vegetables. The required protein will be supplied by the milk. Meats should be withheld for several months.

Prognosis for Future Pregnancies.—While convulsions almost never return twenty-four hours after delivery, we continue to keep a record of the blood pressure, as a basis for our advice concerning future pregnancies.

When the blood pressure returns to its normal limits, and when the albumin disappears from the urine within two weeks, it seems quite safe to predict that the possibility of a toxemia in another pregnancy is very remote, irrespective of the severity of the eclampsia.

When albumin persists in the urine and the blood pressure remains elevated longer than ten days or two weeks, it is almost certain that the toxemia will return in a subsequent pregnancy. The longer the period of resolution, the earlier will the next toxemia make its appearance.

If the patient had prenatal observation, and there was a long period of toxemia, we could assume that some damage was done to the kidneys, and that a toxemia will return with another pregnancy.

Some prognostic value might be placed upon a long period of coma. If the patient regains consciousness rather promptly, it might be inferred that the damage is less.

The prospects will be better for future pregnancies when ample opportunity is given for kidney repair over a long period.

The Water Supply of Vienna.—A short time ago the Vienna Health Bureau celebrated the twenty-fifth anniversary of the opening of the second alpine spring aqueduct. A Festschrift, published for the occasion, contains data on the history of Vienna's water supply. Before 1836, Vienna's fresh water came from local sources and amounted to only 1,600 cubic meters (tons) daily. In that year a new source was utilized, which provided the city with an additional 10,000 tons daily. This was supposed to have been filtered, yet in 1873 an analysis showed the water to contain "cotton fibers, bird feathers, and woolen threads." In those times there were many fatal cases of typhus and cholera. The number of deaths from typhus fluctuated between 412 in 1864 and 1,584 in 1855. The average was 845 deaths annually, or 170 for each hundred thousand inhabitants. Between 1831 and 1873 more than 20,000 persons died of cholera in Vienna. The water brought in was not pure and the quantity was insufficient (20 liters a day for each inhabitant). In addition, much water was drawn from house wells, another source of disease. In 1873 the first alpine spring aqueduct was placed in service, providing pure water. Immediately the number of typhus fatalities decreased. From 1874 to 1883 the annual average was 251 as compared with the earlier 845. During that period, 80 per cent of the houses in Vienna were connected with the new water supply. Since 1888 every building in Vienna has been supplied with pure water. The number of deaths from typhus has steadily decreased. In 1934 there were only twenty-one such fatalities; in 1918 there were 170. The average mortality from typhus for each hundred thousand inhabitants in the period 1891 to 1930 was four, or one-fortieth that of the period 1851 to 1870. Since 1873, cholera has entirely disappeared. In that year there were still 2,854 fatal cases recorded. Forty-seven imported cases were reported for the years 1892, 1893, 1910, 1914, and 1915. True smallpox is today practically unknown here. When the first aqueduct became insufficient, owing to the growth of the city, the second aqueduct was constructed in 1910 to bring Vienna water from a location 170 kilometers (100 miles) distant. The source of the water was located at 6,000 feet above sea level. The two aqueducts supply Vienna with about 380,000 tons daily, which means 200 liters for each inhabitant every twenty-four hours, although the average daily consumption is only 145 per capita. An abundant supply is thus assured. Vienna is known for the excellent quality of its water. The temperature of this water is 8 centigrade (46.4 Fahrenheit) both summer and winter. It is moderately hard and absolutely free from noxious infusions. Every building in Vienna is connected with this water supply.—*Vienna Correspondent, Journal of the American Medical Association.*

The Scotch Appetite.—Maybe there is some foundation for the current stories picturing the Scots as a bit overthrifty, penurious, stingy, close-fisted, and all that. Be that as it may, we at least know by the old records that the typical Scot of four hundred years ago was just the opposite. So the old chroniclers say. Thus wrote the English chronicler, Holinshed, in the year 1577:

"In Scotland they have given themselves (of late years to speak of) unto very ample and large diet, wherein as for some respect nature doth make equal with us, so otherwise they far exceed us in overmuch and distemperate gormandise, and so ingross their bodies that divers of them do oft become unapt to any other purpose than to spend their times in large tabling and belly cheer. Against this pampering of their carcasses doth Boethius very sharply inveigh."

At this same time in England white bread was much used in the diet of the upper classes, but the common people had to use, chiefly, rye. Some very coarse brown bread was made for the poor.

PRE-CONVENTION BULLETIN

CALIFORNIA MEDICAL ASSOCIATION—SIXTY-FIFTH ANNUAL SESSION
CORONADO, MAY 25-28, 1936

Section 3 of Article XII of the California Medical Association Constitution states in part: "The Association, prior to the annual session, shall print a 'Pre-Convention Bulletin,' which shall contain reports of officers and committees. . . . A copy of the 'Pre-Convention Bulletin' shall be given to each delegate and alternate, on or before registration."

The following official reports* are to be presented at the coming session of the House of Delegates.

Delegates are urged to familiarize themselves with their contents.

Members, likewise, are requested to become familiar with the recommendations of these reports and discuss them with other members and delegates.

* * *

I

REPORTS OF GENERAL OFFICERS

REPORT OF THE PRESIDENT

To the Members of the House of Delegates and the Members of the California Medical Association:

Your organization has grown to such a size, with more than 5,400 medical men and women holding membership in forty component county society units, and the problems confronting your group have become so many and so complicated, that the average member, on assuming the presidency, must realize with humility and a feeling almost akin to dismay, the magnitude of the duties which beset him and the responsibilities attached to a position of such importance. He must realize that alone he can accomplish little—by his own unaided efforts little progress can be made.

It was with such a feeling of humility, and with such a sense of responsibility, that your president of 1935-1936 assumed the tasks of his office. In laying aside the honors of the office and in returning to the ranks of membership in his component county society, he hopes that he still retains the same humility and the same sense of responsibility. To these, to his great joy and peace of mind, has been added the satisfaction of having had the privilege of working with such willing, devoted helpers who have coöperated with him to the fullest extent during the entire term of office. Without their aid little or nothing could have been accomplished; with their willing, whole-hearted assistance, there has been, he believes, progress.

Therefore, your president wishes to pay his respects and record his gratitude to the president-elect, to the speaker and vice-speaker, to the secretary-treasurer, to the editor, to each and every member of the Council, and also to General Counsel Peart, for the large part they have played in making the burden of responsibility lighter and, in so many ways, helping him to carry out the duties of his office. He would like, also, to thank the members of the various committees, both standing and appointed, for the loyal, faithful and satisfactory manner in which they have carried on their work. Much of this work has been arduous, time-consuming, and at times carried on at personal financial loss; but it has been at all times well and cheerfully done. As an example, I could mention the labors of our past president, Doctor Toland, who as chairman of the Committee on Postgraduate Work and also as chairman of the California Medical Association San Diego Exposition Committee, has, with his coworkers, accomplished so much at so great an expenditure of time, thought and effort. This example is but an illustration of the splendid work of the committees in general, which space does not allow to be mentioned in detail.

Your president has visited each and every component county society. To accomplish this it has been necessary at times to have joint meetings of two or three societies; but the work has been accomplished with pleasure and profit, to your president at least, and he hopes to the membership at large. These visits were made in company with the secretary-treasurer, whose able assistance is hereby gratefully acknowledged. In each district he has had the company of the district councilor and, on many occasions, that of the councilor-at-large. At such times as were possible, the president-elect, the speaker, the chairman of the Council, and General Counsel Peart accompanied the others and gave their support and advice. In fact, as stated earlier in this report, every officer and councilor gave your president his entire coöperation, of which he is not a little proud and grateful.

The response by the membership to the call for meetings has been most gratifying. Without exception, the officers of the component county societies have coöperated in notifying the membership and arranging for meetings. In the informal chats following the meetings, the officers and members have displayed an intelligent and enthusiastic interest in organized medicine and in its problems.

These meetings, your president believes, have helped materially to acquaint the membership with the kind of democratic representative form of government which bears the name of the California Medical Association. He believes also that they have brought more closely before the membership the problems of organized medicine and the part each member must take in the solution of these problems. They have resulted, he hopes, in better organized, more compact solidarity of the profession and in a greater determination to act as a unit instead of as individuals in the protection of the rights and privileges of the profession, and of the individuals whom that profession serves.

During the past year there have been continuation and expansion of the series of postgraduate conferences of the previous year, the inauguration of Public Health Institutes, and the beginning of a compilation of a corps of speakers who will be available when needed to address lay groups. Contact has been made with the various governmental departments and bureaus, and with the various lay groups throughout the State. The first annual joint meeting of county society officers with State Association officers and councilors was held in San Francisco on January 18. The assembling of a great medical exhibit at the San Diego Exposition, under the auspices of the California Medical Association and the San Diego County Medical Society, has been completed and is at present on display in the Medical Science Building. Your Association, through the central office in San Francisco, has furnished throughout the year, to 250 newspapers, weekly news letters dealing with public health topics and allied subjects. In these and in many other ways, your Association has endeavored to provide intelligent leadership for both our medical confrères and the lay public.

It is to be hoped that these and similar activities will continue to progress and expand, to the end that the California Medical Association may retain its rightful place of leadership in everything pertaining to the health and welfare of the people of California, and in the promotion of the practice of sound scientific medical care by the members of the profession; and to the end that the members of the profession may enjoy that position in society and that state of prosperity to which, as cultured and well-trained men and women, they are entitled.

* The reports are grouped as follows:

Your president has had a wonderful year. He has appreciated your coöperation, your courtesies and your hospitality. He is deeply grateful for the privilege and honor of holding such a distinguished office in this great medical society, which contains so many well-trained, devoted and unselfish doctors.

Respectfully submitted,
Robert A. Peers, *President.*

REPORT OF PRESIDENT-ELECT

To the President and the House of Delegates:

Your president-elect has, during the past year, attended all meetings of the Council, Executive Committee, and Trustees Of The California Medical Association, of which bodies he is, ex officio, a member. He has also attended many county society and other medical meetings with other officers of the Association.

Respectfully submitted,
Edward M. Pallette, *President-Elect.*

REPORT OF THE COUNCIL

The report of the Council will be read at the first meetting of the House of Delegates, and will be included in the minutes of the House of Delegates, to be printed in the July issue (the June issue being in press at the time of the annual session at Coronado).

REPORT OF THE SPEAKER OF THE HOUSE OF DELEGATES

To the President and the House of Delegates:

The Speaker has attended all meetings of the Council, Executive and Special Committees upon which he has been called to serve.

The 1936 session of the House of Delegates promises to be a very important one. Numerous important subjects will come before it. The Speaker urges every delegate to read the reports of officers and committees, and to orient himself as far as possible in regard to the Association and its problems. This will assure prompt and informed action by them, and an early adjournment.

Respectfully submitted,
W. W. Roblee, *Speaker.*

REPORT OF SECRETARY-TREASURER

To the President and the House of Delegates:

It is with genuine appreciation of the honor and privilege that I submit to your body my annual report for the year 1935, as secretary-treasurer of the California Medical Association.

I have condensed several of the sections of this report, because extended comments have been made during the year and are on record in the Minutes of the Council. In consequence, this report is, to a large extent, a summarization of the Association's fiscal year.

It is possibly not amiss to state at this time that the year so recently ended was characterized by several vital incidents that marked the year of 1935 as an epochal year—the ending of one era and the opening of another in the Association's history, by reason of events in our national and state communal socio-political and economic relationships and policies. And yet, withal, a year to which we may refer with justifiable pride as one in which this Association fulfilled its obligations to both the public and to members in a most commendable manner.

MEMBERSHIP

On January 1, 1935, the total membership was 5,169. On December 31, 1935, our membership was 5,402—a gain of 333, represented by the following county society affiliations:

County	1934 No. of Members	1935 No. of Members	Gain	Loss
Alameda	473	459	..	14
Butte	18	24	6	..
Contra Costa	43	44	1	..
Fresno	113	108	..	5
Humboldt	31	28	..	3
Imperial	23	24	1	..
Kern	48	46	..	2
Kings	18	18	..	..
Lassen-Plumas	10	11	1	..
Los Angeles	2,000	2,139	139	..
Marin	33	39	6	..
Mendocino	20	19	..	1
Merced	24	23	..	1
Monterey	46	46	..	..
Napa	27	30	3	..
Orange	107	109	2	..
Placer	29	31	2	..
Riverside	60	64	4	..
Sacramento	132	144	12	..
San Benito	5	5	..	..
San Bernardino	119	128	9	..
San Diego	227	236	9	..
San Francisco	775	809	34	..
San Joaquin	86	88	2	..
San Luis Obispo	25	26	1	..
San Mateo	49	51	2	..
Santa Barbara	99	103	4	..
Santa Clara	168	172	4	..
Santa Cruz	30	29	..	1
Shasta	11	11	..	..
Siskiyou	20	20	..	..
Solano	23	23	..	..
Sonoma	47	53	6	..
Stanislaus	38	41	3	..
Tehama	12	11	..	1
Tulare	37	37	..	..
Ventura	32	33	1	..
Yolo-Colusa-Glenn	25	25	..	..
Yuba-Sutter	11	13	2	..
Del Norte	....	5	5	..
Active Members—Total	5,094	5,325	354	28

	1934 No. of Members	1935 No. of Members	Gain	Loss
Active Members	5,094	5,325	254	28
Associate Members	6	6	..	..
Honorary Members	12	12	..	..
Retired Members	57	59	..	..
	5,169	5,402		
Net Gain for Year 1935				333

MEMBERSHIP BY COUNCILOR DISTRICT

First District

Imperial	24
Orange	109
Riverside	64
San Bernardino	128
San Diego	236
	561

Second District

Los Angeles	2,139

Third District

Kern	46
San Luis Obispo	26
Santa Barbara	103
Ventura	33
	208

Fourth District

San Joaquin	88
Fresno	108
Kings	18
Merced	23
Stanislaus	41
Tulare	37
	315

Fifth District

Monterey	46
San Benito	5
San Mateo	51
Santa Clara	172
Santa Cruz	29
	303

Sixth District

San Francisco	809

Seventh District

Alameda	459
Contra Costa	44
	503

Eighth District

Butte	24
Yolo-Colusa-Glenn	25
Lassen-Plumas	11
Placer	31
Sacramento	144
Shasta	11
Yuba-Sutter	13
Tehama	11
	270

Ninth District

Del Norte	5
Humboldt	28
Marin	39
Mendocino	19
Napa	30
Siskiyou	20
Solano	23
Sonoma	53
	217

Comment.—Every credit must be given to the officers and membership committees of county societies for their efforts to secure the affiliation of eligible physicians. Twenty-two county organizations reflect a gain in membership, while eight show a loss of twenty-eight members; the net gain for the year, after deducting thirty-six deaths, is 228. A survey of eligible physicians warrants making an estimate that our Association can attain a maximum of 6,500 members. The effort will be made to secure that numerical enrollment. Our average is 83⅓ per cent of eligible, desirable physicians in the State.

VISITS TO COUNTY SOCIETIES

In company with the president, president-elect, councilors, or alone, your secretary has attended meetings of the following county societies:

Alameda	Fresno
Los Angeles (Long Beach)	Tehama
San Luis Obispo	Napa
Placer	Siskiyou
Stanislaus (2)	Humboldt
Santa Barbara	San Bernardino
Sonoma	San Joaquin (2)
Butte	San Diego
Plumas	Santa Clara (2)
Del Norte	Marin (3)
Merced	Kern (2)
Sacramento (2)	Solano
Santa Rosa	Lassen
San Francisco (2)	Kings-Tulare
Sutter	Mendocino
Riverside	

These represent forty meetings. It has been a real pleasure to meet with these members, become acquainted with their local problems, and to discuss with them the policies and activities of the State Association; the end sought being to cause these members to realize that our Association has a direct personal interest in their welfare, and that they are an important factor in our State organization. In some localities we were informed that they had never been visited by a state officer. It can be assumed that these visits will eventuate in a more compact, united Association, reflecting greater achievements. In reflecting upon the year's activities, it can be stated that palpable evidence exists that there is a very pronounced increase in the interest members are revealing in their medical organizations. A better understanding exists. The value of membership affiliation is being appreciated more and more. Members are realizing that by unity of purpose and effort it is possible to exercise wholesome influences and power in science, social, political, and economic fields. The California Medical Association renders to its members and to the public a wide range of service that is for their common good.

Additional Meetings.—Your secretary has attended and addressed the following bodies:

San Francisco Y. W. C. A.
Pacific College Conference.
Santa Monica Hospital Association.
San Francisco Problems Group.
Wayne County Medical Society, Detroit, Michigan.
State Secretaries' Conference, Chicago, Illinois.
Seattle Medical Service League.
Portland Service League.
Six local Women's Auxiliary meetings.
State Auxiliary annual meeting.
Medical students at University of California and Stanford University.

Contacts.—Contacts have been made and maintained with the following:

Heads of Departments of State Government.
State Parent-Teachers Association.
Federation of Women's Clubs.
California State Chamber of Commerce.
American Legion.
Rotary Club.
State Forestry Department.
Federal Forestry Department.
United States Public Health Service.
Press Club.
"Time's" Pacific Coast Representative.
Associated Press.
Salvation Army.

While no attempt has been made to keep a record of lay correspondence, it is conservatively estimated that over a thousand lay communications have been received and answered. In each reply, information was given as to the functions and activities of our Association in order that a better understanding may be created in the public mind, and that the public will perceive the advisory service that is being rendered by the Association.

PUBLIC RELATIONS

While the Committee on Public Relations will submit a report to the House of Delegates, the following features are cited as a matter of record:

Public Health Institutes.
Lay Extension Lecture Bureau.
San Diego Fair.
Press releases to two hundred and fifty newspapers.
Bibliography for public libraries.

ANNUAL MEETING

The income from commercial exhibits defrayed all the expenses of the 1935 annual meeting, and earned a net profit of $761.73. All arrangement details were supervised from the general office.

CALIFORNIA AND WESTERN MEDICINE

The duties related to our official publication may be summarized as follows:

Advertising sales $23,816.50, an increase of $1,370.50.
Obtaining contracts by personal solicitations, approximately $1,400.
Addressing—Journal Saving, $720.
Reprint-sales earnings, $845.70.
Reduction of cost production, $2,600.
Preparing copy on Association work for each issue.

A constant effort is being made to increase advertising sales. That an increase in these sales may be expected is evidenced by the nine and one-half pages of new advertising in the January and February issues. Your secretary desires to acknowledge gratefully the helpful assistance and suggestions given by the editor, Dr. George H. Kress, and to express appreciation for his courtesy and friendly consideration. The Association can be justly proud of its official publication.

ASSOCIATION ACTIVITIES

Monthly Letter.—By means of a monthly letter sent to officers of county societies, a closer contact and relationship has been maintained between the central office and the county units. It is quite essential that county officers shall be frequently reminded of the part they have in our programs and activities. A copy of all such communications is sent to every state officer and councilor for their information.

Secretaries' Conference.—The first annual conference of county secretaries was held on January 18, 1936. It is anticipated that desirable reactions will ensue, and that local secretaries will be inspired to fully meet up to the official responsibilities.

Committees.—All of the Association's office facilities and the services of the secretary and office personnel have been placed at the disposal of standing and special committees. In several instances, expense has been saved by mimeographing and writing reports in the central office. While this has at times taxed our resources, it has been a pleasure so to serve.

Medical Colleges.—Your secretary has addressed the senior and junior medical students of the University of California and Stanford University on the objects and functions of medical organizations.

Membership Records.—A "cardex" system of membership records was installed, and the Association now has a perfect membership file, giving full information about every member.

Membership Certificates.—As members paid their dues, a membership certificate, suitable for framing and display in reception rooms, was sent in lieu of pocket cards. Many favorable comments have been received. It is felt that desirable publicity for the Association has been obtained.

Reference Library.—A reference library on medical economics, public health, legislation and allied subjects has been established and is being enlarged. A bibliography of approved texts and articles was prepared and sent to public library librarians as a guide for public reading.

Headquarters Details.—No effort has been made to keep a record of the hundreds of persons seen in the office or the numerous telephone calls that are daily received. The office staff consists of four stenographers, three of whom devote their entire time to Association work. I desire to record appreciation for their loyalty and willingness to give extra time to meet the demands of office operations.

POSTGRADUATE CONFERENCES

The Association recognized its responsibility to provide opportunity for its members to pursue postgraduate work. The Special Committee has prepared a curriculum of courses and clinical demonstrations for councilor districts. These are being developed and extended. It is planned eventually to perfect a definite schedule and to outline a program of work that should be embraced by every member during a given period. A certificate of postgraduate study will be given to every member completing the course.

Appreciation is tendered to the medical department of the University of California for its willing readiness to merge the postgraduate program established by that institution with that of our Association.

FINANCIAL REPORT

The auditor's report is appended, and imparts a certified statement covering all details of our financial operations. The year just ended was one in which important questions and problems made a heavy drain upon Association funds. The operating loss for the year would have been some $11,000 larger had office and administration economies not been inaugurated and earning income increased.

It is incumbent upon the Council to make specific recommendations regarding the financial expenditures of the Association to the House of Delegates.

RECOMMENDATIONS

The following recommendations are tendered:

1. That travel expenses of the President and President-elect be authorized.
2. That a study be made of the Scientific Sections looking toward their reorganization. This is apparently desirable for the purpose of holding our annual meetings in localities that will afford more satisfactory accommodations and auditoriums.
3. That all financial transactions be done through one designated bank.

That the Council recommend to the House of Delegates that the Council be authorized to formulate and adopt a financial budget for the Association's fiscal year in place of the Association year.

IN CONCLUSION

Your secretary has endeavored to carry out the specific instructions of the House of Delegates and the Council in spirit and to the letter, as well as to administer the affairs of the Association in an efficient manner. The quest has ever been to be of every possible service regardless of time or place requisite to comply with instructions and requests. During the past fourteen months, I have been absent from the office approximately fourteen days in one- and three-day periods, on personal business and affairs.

Lastly, I desire to express a very genuine appreciation for all the consideration and courtesies shown to me and for the manifested confidence that was reposed in me. I am, therefore, sincerely grateful for both the opportunity and privilege to serve the Association and its members.

Respectfully submitted,

Frederick C. Warnshuis, *Secretary-Treasurer.*

* * *

BALANCE SHEET
CALIFORNIA MEDICAL ASSOCIATION
At the close of business, December 15, 1935

ASSETS

Cash			
On hand			$ 50.00
On deposit:			
Commercial accounts:			
Bank of America, N. T. & S. A.	$ 1,000.53		
Wells Fargo Bank & Union Trust Co.	595.31		
Savings accounts:			
Anglo-California National Bank	893.05		
Wells Fargo Bank & Union Trust Co.	342.69		
		$ 2,831.58	$ 2,881.58
Accounts Receivable			
Journal advertisers		$ 3,342.40	
Loss: Allowance for doubtful		$ 235.46	3,106.94
Other Assets			
Deposit		$ 75.00	
Accrued interest on savings accounts		11.25	86.25
Permanent			
Furniture, fixtures and office equipment—At nominal value			1.00
Deferred			
Salaries		$ 416.66	
Rent paid in advance		411.00	827.66
Deficit			
Balance, December 15, 1935			26,968.20
			$33,871.63

LIABILITIES

Accounts Payable			
Loans from Trustees of the California Medical Association		$31,000.00	
Advertising Commission		227.40	$31,227.40
Deferred Income			
Exhibit space paid in advance		$ 350.00	
Dues paid in advance		300.00	650.00
Morris Herzstein Bequest			
Unexpended balance of income			1,994.23
			$33,871.63

(NOTE A) The Association had beneficial interest at December 15, 1935, in all of the net assets of Trustees of the California Medical Association. The Balance Sheet of that Corporation as of that date showed net assets of $82,198.10.

(NOTE B) This Balance Sheet is subject to the appended comments and should be read in connection therewith.

* * *

SURPLUS—DEFICIT
CALIFORNIA MEDICAL ASSOCIATION
December 15, 1935

***Surplus*, December 31, 1934, as shown by report**			$ 1,200.92
CHARGES			
Net loss from operations for the period from January 1, 1935, to December 15, 1935, as shown by statement of income and expense:			
Association Division—Loss	$31,723.91		
Journal Division—Gain	5,940.68	$25,783.23	
Write-down of furniture, fixtures and office equipment to nominal value of $1.00		3,067.28	$28,850.51
CREDITS			
Reimbursement of expenses paid in prior years for:			
Trustees of the California Medical Association		$ 494.51	
Indemnity Defense Fund of the California Medical Association	186.88		
		681.39	28,169.12
Deficit, December 15, 1935, as shown by this report			$26,968.20

INCOME AND EXPENSE—ASSOCIATION DIVISION
CALIFORNIA MEDICAL ASSOCIATION
For the period January 1, 1935, to December 15, 1935

Income		
Membership dues	$53,250.00	
Loss: Allocated to Journal	15,894.50	
		$37,355.50
Exhibits at annual meeting		2,859.17
		$40,214.67
Expenses		
Salaries	$14,662.25	
Committee appropriations and expense, public relations, etc.	35,775.59	
Legal expense	4,467.14	
Travel	3,490.24	
Publications and subscriptions	2,597.50	
Rent	2,363.25	
Annual meeting expense	2,097.44	
Office supplies and expense	1,596.02	
Delegates—American Medical Association Convention	1,270.50	
Office equipment expense	1,178.44	
Postage	625.83	
Telephone and telegraph	334.01	
Miscellaneous	1,930.27	
		72,388.48
		$32,173.81
Other Income		
California Medical Society—Rent	$ 600.00	
Interest earned	26.49	
Miscellaneous	1.99	
	$ 628.48	
Less: Other Deductions		
Adjustment of accounts receivable	$ 91.25	
Interest paid	87.33	
	178.58	
		449.90
Loss—Association Division		$31,723.91

* * *

INCOME AND EXPENSE—OFFICIAL JOURNAL DIVISION
CALIFORNIA MEDICAL ASSOCIATION
For the period January 1, 1935, to December 15, 1935

Income		
Advertising		$23,816.50
Allocation of dues		15,894.50
Subscriptions		673.70
		$40,384.70
Expense		
Salaries	$ 7,436.59	
Production	22,387.57	
Commissions	3,304.40	
Distribution	1,158.71	
Rent	787.75	
Office supplies and expense	795.26	
Collection expense	128.56	
	35,998.84	
		$ 4,385.86
Other Income		
Recoveries on accounts previously written off	$ 544.12	
Income from Reprints	845.70	
Sale of Review Books	165.00	
		1,554.82
Gain—Journal Division		$ 5,940.68

REPORT OF THE EDITOR

To the President and the House of Delegates:

The editor's report on papers received, printed, awaiting publication or declined, is as follows:

(a) *Report on papers of the annual session at Yosemite, May 13 to 16, 1935:*

At last year's annual session a total of 160 papers were read before the general meetings and different sections. A summary of the disposition of the papers read at last year's annual session is as follows:

Yosemite annual session papers published in 1935	28
Yosemite annual session papers published in 1936	15
Yosemite annual session papers, read but published elsewhere, declined or not sent in	72
Yosemite annual session papers in CALIFORNIA AND WESTERN MEDICINE files still awaiting publication (annual session papers in this April issue to be deducted)	45
Total annual session papers read at Yosemite	160

(b) *Report on all special articles which have been printed in* CALIFORNIA AND WESTERN MEDICINE *during the period April, 1935 to April, 1936 inclusive:*

Special and original articles which were published in CALIFORNIA AND WESTERN MEDICINE during the past year (April, 1935 to April, 1936 inclusive) are as follows:

Section papers from annual session at Riverside, 1934	19
Section papers from annual session at Yosemite, 1935	37
Papers read before general session at Yosemite, 1935	5
Lure of Medical History articles	12
Papers from Nevada State Medical Association meetings	2
Papers read before county and other medical societies	4
Papers accepted from miscellaneous sources (original articles, abstracts of speeches, reprints from other publications, etc.)	38
Clinical Notes and Case Reports	36
Editorials	58
Editorial Comment articles	27
Bedside Medicine symposia	12
Total papers published during past year	250

(c) *Report on manuscripts in* CALIFORNIA AND WESTERN MEDICINE *files and awaiting publication in April, 1936, and later issues:*

Unpublished papers from annual session at Yosemite	45
Unpublished papers from Nevada State Medical Association meetings	1
Unpublished papers read before county and other societies	3
Unpublished papers not read before other societies	12
Lure of Medical History articles	3
Clinical Notes and Case Reports	18
Editorial Comment articles	10
Bedside Medicine symposia	5
Total manuscripts on hand awaiting publication	97

(d) *Report on non-annual session papers submitted:*

A total of forty-one papers from county societies and other sources, which were submitted for publication in CALIFORNIA AND WESTERN MEDICINE during this past fiscal year (April, 1935 to April, 1936 inclusive) could not be accepted for various and special reasons.

Non-annual session papers submitted, but declined	41

The increase in the number of papers read at the previous annual session, but still awaiting publication, is accounted for in the fact that, during the last year, the extra space demanded properly to explain pressing organization policies and needs, left less room than usual for the scientific contributions. It is true that this list of unpublished manuscripts could be materially reduced if fewer annual papers were accepted. However, it has been the view of the editor and the publication committee that at least 50 per cent of the papers read at an annual session should be printed, if possible, in the official journal of the California Medical Association. Another method of holding down the list of unpublished annual session papers would be to refuse all other contributions from component county societies and miscellaneous sources; but such a policy would detract from the interest of CALIFORNIA AND WESTERN MEDICINE, because it would prevent the acceptance of not a few articles of immediate or important or special interest.

In view of the existing circumstances, it would seem advisable that the House of Delegates recommend a temporary increase in the size of the JOURNAL, for several issues, to permit the early publication of the Yosemite papers still awaiting publication. If this is not done, the same dilemma will face us at next year's annual session, in connection with papers to be read at this coming Coronado session of May, 1936.

At the conference of county society secretaries, held in San Francisco on January 18, 1936, as recorded on page 212 of the March issue, the editor commented in some detail on the problems of the official journal and the manner in which its work was carried on. On that account, the problems there discussed will not be considered in this report.

It is pleasing to note that during the last year a material reduction was secured in printing costs through the generous coöperation of the Barry Company, who have

printed the official journal from the time it was founded in November, 1902. In conference, the Barry Company authorized the editor to inform the Council that they would reduce their charges to the very lowest sum, consistent with good printing, thus creating a saving of about $2,600 annually.

The improvement in business throughout the country has also been reflected in an increase in the number of advertisements, thus decreasing the bookkeeping deficit from that source, which had been so much in evidence during the last six years.

The federal postal regulations provide that all magazines having the status of official publications of organizations must have a definite subscription price. In the "prosperity days" prior to 1929, that price was set by the Council at $2 per member, but this proved, in the more recent years, to be a sum quite insufficient to cover the expense of producing and printing CALIFORNIA AND WESTERN MEDICINE, in which advertising income was so greatly lessened. The Council, therefore, a few months ago made the rate of subscription for California Medical Association members three instead of two dollars, and allocated funds on that basis. As a consequence of this action and an increase in the advertising income, there is now at the end of this year a bookkeeping profit, just as in late years there was a bookkeeping deficit. The California Medical Association, in common with other state medical associations, is committed to the publication of an official journal, and its net cost, in so far as an allocation of moneys from dues of members is concerned, must be the difference between the total expense of the JOURNAL and the total income from advertising, upon which amount the real subscription price would be based on that difference. The federal regulations, however, make it necessary to set in advance a subscription rate, and this naturally may either be in excess or below the actual amount needed, as previously noted. These explanatory comments are made for members who are, of course, not familiar with these matters and who may have had some difficulty in understanding the supposed (bookkeeping) deficits and profits of the official journal.

As in previous years, your editor wishes to thank the many members who have submitted the articles, and also those who have responded with special papers when called upon. The cordial coöperation, too, of contributors and of the Council has added greatly to the pleasure incident to the work of editorship.

Respectfully submitted,

George H. Kress, *Editor.*

REPORT OF THE LEGAL DEPARTMENT

To the President and the House of Delegates:

Since the adjournment of the House of Delegates at Yosemite May 16, 1935, the legal department of the Association has dealt with a number of major propositions.

Legislative.—Memoranda and opinions were prepared regarding pending legislative measures. Opinions were also prepared as to the constitutionality, validity, and meaning of a number of bills which passed the legislature and became statutes. Amendments were prepared drastically amending Senate Bill 471, which undertook to create a new form of insurance, to wit: medical and hospital insurance. These amendments were forwarded to the chairman of the Legislative Committee, and were subsequently adopted by the Assembly, whereupon Senate Bill 471 was allowed to die on the files. During the year a great deal of work was done assisting the special committee charged with the preparation of the proposed qualifying certificate act.

Anesthesiology.—At the direction of the Council and on request of the specialists involved, this department undertook the responsibility of prosecuting the appeal to the Supreme Court of California in the case of *Dr. Chalmers-Francis and others* vs. *Dagmar A. Nelson and the St. Vincent Hospital.* The matter was handled in coöperation with Attorney LeRoy Anderson, representing the specialists. Exhaustive briefs were filed and a motion to dismiss the appeal of Doctor Chalmers-Francis and his associates was successfully resisted. This case is now under submission. and a decision can be expected at any time,

Corporate Practice.—At the direction of the Council, we appeared as *amicus curiae* before the Superior Court at San Francisco in the case of *Pacific Employers' Insurance Company* vs. *The Insurance Commissioner,* a proceeding to compel the Insurance Commissioner to approve certain insurance policies. These insurance policies, while on their face providing for cash indemnity for illness and accident, were, nevertheless, by virtue of clauses contained in the application for the policy, in effect agreements for the furnishing of the services of physicians. The case was lost before the Superior Court, and the Attorney-General took an appeal. We again, in collaboration with Mr. A. J. Kennedy, counsel for the dental associations, and Mr. A. B. Bianchi, one of the attorneys for the State Bar, appeared and submitted briefs as *amici curiae* on the appeal. The District Court of Appeal, in deciding the case, held that:

"Before setting forth the terms of the policies, it may be stated that it is well settled that neither a corporation nor any other unlicensed person or entity may engage, directly or indirectly, in the practice of certain learned professions including the legal, medical, and dental professions . . . (citing cases) . . . Under the foregoing authorities it is clearly declared unlawful for a corporation to indirectly practice any of said professions for profit by engaging professional men to perform professional services for those with whom the corporation contracts to furnish such services. In other words, said authorities declare that said professions are not open to commercial exploitation, as it is said to be against public policy to permit a 'middleman' to intervene for profit in establishing the professional relationships between the members of said professions and the members of the public. (*Hightower* vs. *Detroit Edison Co.,* 247 N. W. 97.)"

It is interesting to note that the amendments which this department prepared to Senate Bill 471, and which were adopted by the Assembly of the State Legislature, were commented on by the District Court of Appeal in the following language:

"Petitioner discusses at some length the social and economic need for health insurance. We assume that petitioner refers to compulsory health insurance or some form of health insurance similar to that offered in petitioner's policy, as health insurance policies are now provided for under the above-mentioned act. It is a matter of common knowledge that the general subject of health insurance has provoked much discussion in recent years, and it is also a matter of common knowledge that there is a great diversity of opinion concerning this subject. There are those who believe that the time has come when the rules so firmly established by the authorities above cited should be changed or modified in certain respects. We do not feel called upon, however, to discuss this question, for if the established rules are to be changed or modified, we deem it to be the province of the legislature rather than the courts to determine when, to what extent, and under what conditions and restrictions, the change or modification should be made. In this connection, it is of interest to note the legislative history of Senate Bill No. 471, introduced at the 1935 session of the legislature, as shown by the legislative journals of which we may take judicial notice. (*French* vs. *Senate,* 146 Cal. 604.) Said bill was apparently introduced for the purpose of legalizing the type of insurance provided by the policy before us. In the Assembly Journal of May 23, 1935, at page 22, it appears that the Assembly amended the bill to eliminate all reference to dentistry. In the Assembly Journal of June 12, 1935, at pages 42 to 46, it appears that the bill was amended to eliminate all reference to medicine, and the following was added: '*This chapter shall not authorize and nothing in this chapter shall be construed as authorizing any corporation or any insurer licensed hereunder or any person other than a holder of a valid and unrevoked physicians and surgeons' certificate to practice medicine and surgery directly or indirectly or to furnish professional services of physicians and surgeons.*' The bill was thereafter permitted to die on the files without being brought up for final passage. It thus appears that the legislature was not yet prepared to change or modify the established rules prohibiting the corporate practice of medicine and dentistry." (Italics supplied)

This case for the first time establishes in a court of record in California that a corporation cannot practice medicine any more than it can practice law or dentistry.

County Hospitals.—A third case of primary importance which engaged the department's attention during the year is that of *Goodall et al.* vs. *Brite et al.*, the Kern County hospital case, in which the taxpayer physicians first secured an injunction from Superior Judge Van Zante, from which the supervisors appealed. The District Court of Appeal, Fourth Appellate District, affirmed the decision. The following paragraph from the court's opinion indicates its reasons for deciding in favor of the taxpayers:

"In approaching this question it should be borne in mind that the record establishes the fact that there are excellent privately owned hospitals in Kern County with sufficient facilities to care for those who can pay for their care and treatment. It seems, therefore, that the question is not so much the preservation of the health and general welfare of the financially able citizens of the county as it is one of the preservation of their private resources. If a patient can be given the same and equally efficient care and treatment in a private hospital that he can receive in the county institution, his choice of a hospital does not determine his chances of recovery, but merely the amount he must pay to be healed, and whether he will pay the established charge of a private institution, or nothing, or the small donation hoped for by the county hospital. The preservation of the health and general welfare of the citizens of the county is a question of the prevention and cure of disease generally, and not the accomplishment of these ends by any particular means or in any particular institution. We, therefore, conclude that the admission and treatment of patients in the county hospital who, either themselves or through legally responsible relatives, can provide themselves with equally efficient care and treatment in private institutions does not promote the health and general welfare of the citizens of Kern County and is not a proper exercise of the police power of that county and results in the use of public money for private purposes."

The supervisors of Kern County, with the supervisors of eleven other counties appearing by *amicus curiae*, petitioned the Supreme Court for a hearing. March 30, 1936, the Supreme Court denied this petition.

The Association of California Hospitals, through their counsel, Messrs. Music, Burrell & Churchill, wrote excellent *amici curiae* briefs, and through Mr. Churchill appeared at the argument in the District Court of Appeal. An initiative is now being circulated for signatures to nullify this ruling.

Physicians' Defense and Indemnity Insurance.—The committee on this subject has done a great deal of work during the year, and the legal department has advised with the committee at its meetings and assisted in the preparation of its report to the Council. As the committee's report will deal fully with this subject, this report will not be extended by further mention of the matter.

Disciplinary Procedure.—A great deal of time and study has been given by the committee charged with the preparation of this proposed new by-law, and the legal department has endeavored to do its part of this work. As the committee's report will deal fully with this subject, the matter will not be discussed here.

Exemption from Capital Stock and Income Tax.—During the year a ruling has been obtained from the Treasury Department of the United States, holding that the Trustees Of The California Medical Association and the California Medical Association are not subject to the federal capital stock tax or income tax.

Miscellaneous.—During the year opinions of considerable interest have been requested and furnished dealing with such subjects as compensation for expert testimony, effect of city ordinances regarding examination of school children, disciplinary procedure under the constitutions and by-laws of several component county societies, the power of cities to impose license taxes on physicians; papers and articles with reference to libel have been examined and opinions rendered thereon; advice and assistance has been given in the preparation of constitutions and by-laws of two component county societies; the usual attendance at meetings of the Council, Executive Committee and other standing committees, has obtained throughout the year.

Respectfully submitted,

Hartley F. Peart, *General Counsel.*

II

REPORTS OF DISTRICT COUNCILORS

FIRST COUNCILOR DISTRICT

San Bernardino, San Diego, Riverside, Orange, and Imperial Counties

To the President and the House of Delegates:

The first six months of my councilorship have been very busy and interesting. They have been busy, as I have attended all meetings of the Council whether called for San Francisco or Los Angeles. Riverside County Society has been visited twice; Orange County Society has been visited two times. Imperial and San Diego County societies have each had a visit. The home county has not been overlooked. The personal acquaintances and contacts in the different societies have greatly increased, and will make for efficient and pleasant conditions in the future.

It has been interesting to meet these men and know that they are not more interested in their own welfare than they are to see that nothing may prevent the patient receiving other than adequate and efficient care. The county membership, whether large or small, has been very cordial, and all members present a solid front for the advance of matters pertaining to medicine and surgery.

Each county in the First Councilor District is planning on a postgraduate conference this spring. These meetings were so well attended last year that it is necessary to repeat. Riverside plans a meeting for March 23, San Bernardino, April 7; Orange and Imperial have not announced a time of meeting.

Every secretary of the First Councilor District was in attendance at the Secretaries' Conference held in San Francisco last month. It was a profitable meeting, and should be continued in the years to come.

Respectfully submitted,

Calvert L. Emmons, *Councilor, First District.*

SECOND COUNCILOR DISTRICT

Los Angeles County

To the President and the House of Delegates:

During the past year much has been done to consolidate our position in Los Angeles County. In the past several years there has been a gradually increasing interest shown by the members of the Association in the work which their organization is trying to do, and a greater appreciation of the importance of organization and of organized effort looking to a solution of the many economic, social and professional problems which are facing us. The most dangerous force operating against medicine is not represented by those well-financed lay groups seeking the regimentation of the profession, nor the superintendental proponents of antivivisection, nor in the organized attacks of the untrained for equal professional status, but in the inertia within the ranks of medicine itself.

The campaign which has been waged by the county and state organizations to combat this inertia is showing increasing results. There is manifest a greater readiness on the part of the individual member to accept responsibility and to bear a part in the activities of the Association.

As the secretary of the Los Angeles County Medical Association recently stated, "The past year has witnessed little of the unwarranted, unconsidered, destructive criticism that, before this present time, was accepted as a most undesirable yet strikingly inharmonious motif in the design of the fabric of medical organization."

In all this work, the Association's building and its facilities have been a very potent factor making for good fellowship and serving to increase the number of contacts which the Association makes with the profession and the public.

As a result, we now are better prepared to meet the never-ending series of issues, many of which are and will continue to be inimical to the very existence of the profession.

Respectfully submitted,

C. R. Howson, *Councilor, Second District.*

THIRD COUNCILOR DISTRICT
Kern, San Luis Obispo, Santa Barbara and Ventura Counties

To the President and the House of Delegates:

The hospital situation in Kern County continues to hold the center of the stage in the Third District, and the report on its present status will be given by our legal department. It is again a pleasure to report that the members of the Kern County Society are maintaining their solid front in their fight against intolerable conditions. If all our component societies would pull together as does Kern, we could face our coming economic problems with confidence.

The visits of our president and secretary to the San Luis Obispo, Kern, and a joint meeting of the Santa Barbara and Ventura county societies, were found to be of greater importance than we at first expected. As a result an understanding of the value of the State Association has been given to the rank and file of our membership such as they have never had before, and this has proven of inestimable value, both to them and to the Association. A marked increase in the individual interest has been noted since these meetings.

Respectfully submitted,
Henry J. Ullmann, *Councilor,*
Third District.

FOURTH COUNCILOR DISTRICT
Fresno, Madera, Kings, Tulare, Merced, Mono, Mariposa, Inyo, Calaveras, San Joaquin, Tuolumne, and Stanislaus Counties

To the President and the House of Delegates:

Your councilor of this district has had a busy year, and feels he has learned a good deal about the activities and duties of a councilor, and much about the problems of the county societies of the district. All of the Council meetings have been attended. Every society has been visited once or more, and many meetings were combined with a visit by President Peers and Secretary Warnshuis.

Committee work, involving a state-wide study of tax-supported hospitals and medical service, has made much demand on the time of this councilor, but has offered an opportunity for important service to the entire profession of the State.

The Councilor feels that the California Medical Association membership of this district is active and wide-awake on the many questions that need an answer from our profession.

The promotion of voluntary hospital insurance has been approved by the Fresno County Society, where also an adaptation of the Alameda plan is making a promising showing. Much interest in means to curb the abuse of county hospital service has developed.

The duties of the physician, as a citizen, to assume leadership in the efforts to solve medical and hospital problems for the greatest public good, as well as for his own protection, are receiving much merited consideration.

At Modesto, Stanislaus County Society offered a postgraduate course as sponsored by the California Medical Association. This course was well attended, and was open to members of adjoining societies. Other such courses are being promoted in the district.

An alert, harmonious membership, which includes nearly all of the eligible licentiates in this district, augurs success in the attainment of higher professional accomplishments, and the solution of our many social-economic problems.

Respectfully submitted,
A. E. Anderson, *Councilor,*
Fourth District.

FIFTH COUNCILOR DISTRICT
Monterey, San Benito, San Mateo, Santa Clara, and Santa Cruz Counties

To the President and the House of Delegates:

The county societies in the Fifth Councilor District, with the exception of one, have had an active year. Unfortunately, I was unable to attend the meeting at which President Peers and Secretary Warnshuis visited the Santa Clara County Society. However, their meetings with the Monterey and Santa Cruz county societies were an inspiration to the members and were well attended.

The postgraduate program at the Santa Clara County Hospital on January 29 was interesting and instructive, but, unfortunately, poorly attended.

From information gained, I believe there will be a larger attendance at the annual meeting in Coronado from this district than in the past.

Respectfully submitted,
Alfred L. Phillips, *Councilor,*
Fifth District.

SIXTH COUNCILOR DISTRICT
San Francisco County

To the President and the House of Delegates:

The San Francisco County Society has laid the groundwork for future progress by careful study of the many local and state problems which are so vital to the life of organized medicine and to the welfare of the individual members.

There is a greater desire for close coöperation than ever before. Following the leadership of Dr. J. C. Geiger, Dr. P. K. Gilman will do much to consolidate gains made in the past year, and will lead on to even better understanding of our problems and of one another.

The present great problem is the same that we have had with us for the past few years—hospital and health insurance. Our present attempt is to find a means of hospital insurance which will be acceptable to the hospitals and yet protect the practice of medicine.

Respectfully submitted,
Karl L. Schaupp, *Councilor,*
Sixth District.

SEVENTH COUNCILOR DISTRICT
Alameda and Contra Costa Counties

To the President and the House of Delegates:

Alameda County is still working on her hospitalization plan and hopes to have something definite to report soon. The plan is entirely under the guidance of organized medicine and the accredited hospitals of the East Bay.

Respectfully submitted,
O. D. Hamlin, *Councilor.*
Seventh District.

EIGHTH COUNCILOR DISTRICT
Alpine, Amador, Butte, Colusa, El Dorado, Glenn, Lassen, Modoc, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Sutter, Tehama, Yolo, and Yuba Counties

To the President and the House of Delegates:

All of the component county medical societies in the Eighth District of the California Medical Association have been visited one or more times during the past year. At these meetings the councilor has endeavored to report to the societies all matters of importance relative to the actions taken by the Council, and to bring to their attention such other matters as were deemed advisable relative to the findings of added interest in organized medicine.

The councilor accompanied President Peers, Secretary Warnshuis, Councilor Rogers, Attorney Peart and his associate, on their tour of visits to the societies in the Eighth District, and he was particularly pleased with the reception of the State Association officers by the component societies; also the extreme interest shown in matters brought to their attention incident to this visit. Special arrangements were made for meetings in order to accommodate the itinerary of President Peers. The meetings were well attended. A very keen interest is being shown by the membership in matters economical and political which bear a direct influence upon our State organization. Membership drives have been carried on, and practically all of the eligible physicians and surgeons in the various communities have accepted membership in their regional societies. Much has been accomplished, I am sure, by the frequent contacts between the councilor and the various societies, and it has become manifest that such interests must be constantly stimulated by the State Association officers representing them in the executive body.

Much interest was shown in matters pertaining to hospital and medical service plans, hospitalization in tax-supported hospitals, and medical legislative problems.

It was particularly gratifying to note at the Secretaries' Conference that we had a 100 per cent attendance from the Eighth District.

Respectfully submitted,
C. E. Schoff, *Councilor, Eighth District.*

NINTH COUNCILOR DISTRICT

Del Norte, Humboldt, Lake, Marin, Mendocino, Napa, Siskiyou, Solano, Sonoma, and Trinity Counties

To the President and the House of Delegates:

A brief report of the medical societies' activities in the Ninth Councilor District during the year 1935 is submitted:

During the past year and since the submission of the preconvention report for 1934, I have made councilor visits to all the county medical societies in this district, and to most of the societies repeated visits have been made in order to inform them of the work of the Council and the activities of organized medicine in California.

As previously reported in CALIFORNIA AND WESTERN MEDICINE, the Lake County Society held their meeting at Clear Lake Lodge on August 4, at which time their charter was presented to them.

On October 19, 20, 21, and 22, Doctor Peers and Doctor Warnshuis made their official visits to the medical societies of the northern part of the State. On this trip I was the guest of Doctor Schoff at meetings held in Marysville and Chico in the Eighth District. There was a joint meeting held at McCloud on October 20, with members from Shasta, Trinity, Lassen, Plumas, Modoc, and Siskiyou county societies, a combination of societies from both the Eighth and Ninth districts. Present also, were visitors from Medford, Oregon and San Francisco.

The interest that the physicians of these counties take in the California Medical Association is shown by the fact that these men all drove distances of from 35 to 180 miles to this meeting. Doctor Schoff and Mr. Peart returned to San Francisco after the meeting at McCloud, as they were unable to attend the meetings at Crescent City and Eureka, held on October 22.

The meeting at Crescent City was held with the physicians of Del Norte County at noon, and the evening meeting was held at Eureka, with Humboldt County physicians present. These were all special meetings, held to receive our president, Doctor Peers, and they were well attended and instructive to the members and the State officers.

Interest in organized medicine is steadily growing among the physicians of this district. Members are visiting adjacent county meetings. A spirit of good fellowship is being exemplified, and personally I am very proud of the medical societies in the Ninth District.

Respectfully submitted,
Henry S. Rogers, *Councilor, Ninth District.*

III

REPORTS OF COUNCILORS-AT-LARGE

To the President and the House of Delegates:

The recent meeting of the county society secretaries at San Francisco was probably the greatest affair of the California Medical Association during the past year. Such meetings will undoubtedly help to weld the State Association into one solid mass.

Every opportunity is being taken to inform the local membership on important points.

The local societies should be more careful in their selection of delegates.

Respectfully submitted,
C. O. Tanner, *Councilor-at-Large.*

To the President and the House of Delegates:

As one of your councilors-at-large, it has not been my privilege to visit many of our component county units, but in the ones I have visited, it seems to me, the members are taking more interest in the Association, as a whole, and their drive for new members is having its results. I believe this renewed interest is due principally to the efficient work of our secretary, Doctor Warnshuis, and the splendid coöperation of our past and present Presidents Doctors Toland and Peers. This Association is to be congratulated for having secured the services of such a well-qualified colleague for the position as Secretary.

I also want to comment on the high standard and quality of our journal, CALIFORNIA AND WESTERN MEDICINE. The Association is very fortunate in having the services of such an able editor. While the Council spent a lot of the Association's savings the past year, and some of us were not in sympathy with the cause, it was done by the order of the House of Delegates, and we hope it has done some good in educating our members.

Respectfully submitted,
W. H. Kiger, *Councilor-at-Large.*

To the President and the House of Delegates:

During the past year, as councilor-at-large, I have served as chairman of the Council and, in addition to the duties incident thereto, I have endeavored to discharge the following assignments:

1. Member of the Committee of Six, created by the special session of the House of Delegates at Los Angeles March 2-3, 1935.
2. The presentation of the case for the California Medical Association in the matter of the Ross-Loos appeal before the Judicial Council of the American Medical Association at Atlantic City on June 7, 1935.
3. Delegate from the California Medical Association to the 1935 annual session of the House of Delegates of the American Medical Association at Atlantic City, June 10-14, 1935.

In addition to these duties, during the past year I have addressed two lay meetings in an attempt to present the present status of health insurance in California and its possible future in California and to show the apparent impossibility of obtaining satisfactory compulsory health insurance laws in the State, not alone from the standpoint of medicine, but from that of the public also.

This year completes a three-year term as councilor-at-large, and in making this report I should like to stress the point that the Association, in the matters of legislative program, malpractice insurance, health and hospital insurance, and the attempt by hospitals to divide medicine into so-called professional and technical fields, is confronted by major problems that require the most earnest consideration, and in my opinion, for the protection of the future practice of medicine, some positive action by organized medicine.

Respectfully submitted,
T. Henshaw Kelly, *Councilor-at-Large.*

To the President and the House of Delegates:

Your councilor-at-large has attended all meetings of the Council and many meetings of committees. One trip to San Luis Obispo was made on invitation of that county society to meet with it.

Respectfully submitted,
Morton R. Gibbons, *Councilor-at-Large.*

IV

REPORTS OF STANDING COMMITTEES*

COMMITTEE ON ASSOCIATED SOCIETIES AND TECHNICAL GROUPS

Executive Group

William J. Kerr, Chairman, 1938
William H. Geistweit, 1936 John V. Barrow, 1937

To the President and the House of Delegates:

The only matters brought to the attention of this committee concern the Woman's Auxiliary. They are developing an active and efficient organization which should be of great value in the cause of medical science and practice. The wives of physicians are in the position of interpreters to the public. The Medical Association should

* Members of Standing Committees are urged to meet during the annual session and organize for the coming year, and to hold at least one regular meeting of their respective committee during the annual session.

profit by suggestions from this enthusiastic and loyal group, and should encourage them to originate suggestions.

We would like to suggest that our committee have an opportunity to meet with the other committees of the Society to discuss matters of common interest, either at the time of the annual meeting of the California Medical Association or at some other time convenient to all concerned.

It would seem that the Woman's Auxiliary should exert an influence in the assembly districts, and coöperate with the several county medical societies to bring matters of importance to the attention of the public, not only at the time of elections, but at all times. It is suggested that the coöperation of physicians could be secured to send information to their patients in coöperation with the medical societies and the Woman's Auxiliary.

Respectfully submitted,
William J. Kerr, *Chairman.*

COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION

Executive Group

Fred B. Clarke, Chairman, 1938
W. R. P. Clark, 1936 Benjamin W. Black, 1937

To the President and the House of Delegates:

This particular standing committee's activity has been evidenced in giving consideration to measures and methods for bringing about a better understanding on the part of the public regarding questions of public and private health. Your committee has transmitted to the Committee on Public Relations recommendations that have been initiated in the form of public health institutes, newspaper publicity, speakers' bureau for lay audiences, and contacts with Parent-Teachers' organizations.

The results of these movements are imparted in a detailed report by the Committee on Public Relations.

Your committee has given much thought to the preparation of educational leaflets and their furnishing to members and to public corporations, to be included with their monthly statements. Financial expense for printing and distribution by members and utility corporations has prevented the carrying out of this proposal. To be effective, the following amount of leaflets would have to be printed:

For members, 6,480,000. (This provides each member with one hundred leaflets each month.)

For public utilities, 25,000,000 (twelve mailings in metropolitan areas).

The estimated cost for printing, distribution, etc., would be about $6,000 per year. These funds were not available.

Your committee is impressed by the value of such educational measures. We voice the hope that the House of Delegates will record action that will increase the Association's income in order that expanding activities may be carried out in fullest detail.

Respectfully submitted,
Fred B. Clarke, *Chairman.*

COMMITTEE ON HISTORY AND OBITUARIES

Executive Group

George D. Lyman, Chairman, 1937
Frank R. Makinson, 1938 J. Marion Read, 1936
The Secretary, ex officio The Editor, ex officio

To the President and the House of Delegates:

The Committee on History and Obituaries, of which Dr. J. Marion Read and Dr. Frank R. Makinson are members, and of which I have the honor to be the chairman, has held no meetings during the last year.

However, much material on California medical history has been collected. It is hoped to assemble this within the near future, in book form.

Particularly is the committee grateful to the many interesting accounts which Dr. George H. Kress of Los Angeles has turned over to the committee.

The Council recently authorized the editor to secure a biographical sketch of Dr. Joseph P. Widney, founder of the Los Angeles County Medical Association, which will appear in the April and May issues of CALIFORNIA AND WESTERN MEDICINE.

Attention is called to this in order to urge every component county society to secure from living founders or cofounders, or early members, similar accounts. Also to suggest that old county society record books be sent for safekeeping to the central office of the California Medical Association. Request is made that every county society appoint a committee to take up this work during the coming year.

Following is a list of members of the California Medical Association whose deaths occurred during the last year:

IN MEMORIAM

Adler, Herman Morris, December 6, 1935, Berkeley.
Barkan, Adolph, August 28, 1935, Zurich, Switzerland.
Baxter, Donald Erskine, July 30, 1935, Glendale.
Bill, Philip August, August 27, 1935, San Francisco.
Blanchard, Lynne Harry, September 5, 1935, Oakland.
Burbank, William Winston, November 29, 1935, Long Beach.
Calder, Daniel H., July 18, 1935, Los Angeles.
Cole, George Llewellyn, August 19, 1935, Los Angeles.
Cressman, Ralph Gates, October 18, 1935, Stockton.
DuBois, Charles Warren, December 17, 1935, Los Angeles.
Dunlap, Florence Mary, November 13, 1935, Brawley.
Floersheim, Samuel, October 3, 1935, Los Angeles.
Garcelon, Harris, August 1, 1935, Arrowhead Springs.
Irwin, Stewart Vernon, July 1, 1935, Oakland.
Johnson, Carl Arthur, November 20, 1935, Imola.
Kapp, Russell William, May 5, 1935, San Jose.
Kiefer, Hugo Albert, October 26, 1935, Los Angeles.
Lynch, Edward Clarence, September 18, 1935, Montebello.
Macrae, Annie D., April 23, 1935, San Francisco.
Madden, Thomas Frederick, September 8, 1935, Fresno.
McNamara, Thaddeus M., Jr., July 15, 1935, Bakersfield.
Nahman, Adolph H., September 18, 1935, San Francisco.
Parsons, James J., October 18, 1935, Monrovia.
Poole, Richard E., June 13, 1935, Yountville.
Rehfisch, John Morse, September 15, 1935, San Francisco.
Ruediger, Gustav F., July 6, 1935, Pasadena.
Schroeder, Leo A., October 29, 1935, Los Angeles.
Smith, Rea, November 29, 1935, Los Angeles.
Shuman, Joseph R., March 10, 1935, Los Angeles.
Silliman, John C., October 27, 1935, Palo Alto.
Stern, Arthur Alonzo, July 11, 1935, Sacramento.
Trewhella, James S., February 11, 1935, Montebello.
Van Zwalenburg, Cornelius, July 23, 1935, Riverside.
Weaver, Archibald Carlton, October 25, 1935, Santa Monica.
Weger, George S., January 16, 1935, Redlands.
Weymann, Morie Frederick, January 13, 1935, Los Angeles.
Whitney, James L., March 12, 1935, San Francisco.

Respectfully submitted,
George D. Lyman, *Chairman.*

COMMITTEE ON HOSPITALS, DISPENSARIES AND CLINICS

Executive Group

Daniel Crosby, Chairman, 1936
John C. Ruddock, 1938 Karl L. Schaupp, 1937

To the President and the House of Delegates:

The Committee on Hospitals, Dispensaries, and Clinics has found the details of its work covered by your Public Relations Committee. Being cognizant of the details that were given consideration by the Public Relations Committee, and in sympathy with its conclusions, this committee has found nothing for its separate consideration.

Respectfully submitted,
Daniel Crosby, *Chairman.*

COMMITTEE ON INDUSTRIAL PRACTICE

Executive Group

Morton R. Gibbons, Chairman, 1938
Mott H. Arnold, 1936 Harry E. Zaiser, 1937

To the President and the House of Delegates:

During the last year no new problem and no claim for the attention of this committee have materialized.

The report of last year announced a ruling of the chairman of the Industrial Accident Commission that there would be no departure from the fee schedule for industrial accident practice until after hearing or investigation. There has been no further agitation on the question.

Whether or not, and in what manner, the insurance companies are living up to the fee schedule at this time this committee has no information.

The chairman of your committee has prepared a resolution which, if adopted by the House of Delegates will provide for local committees to review medical testimony in all hearings and court cases. Your committee recommends careful consideration of this resolution and feels that its adoption will be one step in advance toward removing some of the errors that have been quite prominent in the past.

Your committee will always welcome any information regarding personal experiences of members on the subject of industrial accident practice.

Respectfully submitted,
Morton R. Gibbons, *Chairman.*

COMMITTEE ON MEDICAL DEFENSE

Executive Group

George G. Reinle, Chairman, 1938
Fred R. DeLappe, 1936 John P. Nuttall, 1937

To the President and the House of Delegates:

This committee will submit a special report to the Council, for transmittal to the House of Delegates.

Respectfully submitted,
George G. Reinle, *Chairman.*

COMMITTEE ON MEDICAL EDUCATION AND MEDICAL INSTITUTIONS

Executive Group

Loren R. Chandler, Chairman, 1936
B. O. Raulston, 1938 John B. Doyle, 1937

To the President and the House of Delegates:

Inasmuch as the activities of the four medical schools in California are well known, and have been described adequately from time to time in bulletins and reports, your Committee on Medical Education and Medical Institutions has held no meetings during the year.

Respectfully submitted,
L. R. Chandler, *Chairman.*

COMMITTEE ON MEDICAL ECONOMICS

Executive Group

John H. Graves, Chairman, 1938
William R. Molony, Sr., 1936 Willard J. Stone, 1937

To the President and the House of Delegates:

Since many of the activities of this committee have become part of the program of the Committee on Public Relations, no regular meetings of the Committee on Medical Economics have been held. Correspondence between the members of the committee and the chairman has been maintained, and the chairman has regularly attended the meetings of the Public Relations Committee and presented the views of the Committee on Medical Economics.

Respectfully submitted,
John H. Graves, *Chairman.*

COMMITTEE ON MEMBERSHIP AND ORGANIZATION

Executive Group

E. Vincent Askey, Chairman, 1938
Dewey R. Powell, 1936 Thomas H. McGavack, 1937
The Secretary, ex officio

To the President and the House of Delegates:

The foundation of any organization is its membership. In a profession this basic structure should be representative; should be large enough to be considered the official voice of the entire profession. Following membership, organization comes next in importance.

Your Committee on Membership and Organization begs to report that, both in membership and in organization, the California Medical Association is not lacking when compared with other state organizations.

Much can be done, and must be done, however, to strengthen the basic structure. For reasons too obvious to mention here, the need for a larger and better organized membership is greater in California than in any other section of the United States. The work must go on. The responsibility for its accomplishment rests almost entirely with the secretaries of the various component county medical societies.

Your Committee on Membership and Organization can do little more than give every possible aid to these secretaries; to point out the need for increasing membership; to encourage them in their campaigns; to assist them with plans, and to arm them with arguments to present to prospective members.

Efficient membership work in each county must have, as a starting point, a knowledge of who are the nonmembers and who among them are eligible for membership. This has called for a survey which was made about a year ago by the secretaries of the county societies. The result of this survey was presented by Dr. Edward M. Pallette, president-elect, in the March issue of CALIFORNIA AND WESTERN MEDICINE, on page 211.

This survey showed that in one county 93 per cent of the doctors of medicine were members of that county society. Many of the smaller counties showed membership records of 70 per cent, or more, of the doctors in their counties.

Los Angeles County, with 58 per cent, and San Francisco County, with 52 per cent, are representative of the percentages to be found in the larger communities. The reason for this drop in percentages is known. The retired doctor of medicine, still licensed to practice, and the noneligible are found in greater proportion in the larger cities; especially is this true of California.

A study of this survey shows that in California only about 17 per cent of those who should be members are not members; a fact that warrants optimism and should encourage those who are carrying on this work.

One hesitates to urge a campaign for members. A campaign indicates an activity that is limited either by time or by results. A campaign usually comes to an end. The responsibility for increasing membership should at all times be recognized by county secretaries. Membership should be increased steadily and surely.

First, the eligible nonmembers should be contacted and sold on the value of membership. If they are eligible, and if they are sold on the value of the Association, they will become members. If they are not sold, the fault is not theirs—if they are truly eligible; if they are the type of men who understand what the preservation of their profession means to them and to the public, the fault rests with the one who solicited them, or in the lack of a worthwhile county organization.

A county secretary usually has, or should have, means of learning when a new doctor takes up his residence and practice in his county. That doctor should be contacted for membership as soon as possible after his eligibility is established.

The most important selling point, naturally, is found in the organization that is accomplishing things. In any county the county medical society may find plenty of things to accomplish. What such an organization must do varies in the different counties; it remains a county problem. However, the way to county activities, and the nature of these activities, to a large extent is made clear by a thorough understanding of the problems of medicine in California; by a knowledge on the part of the membership of what the California Medical Association is doing and must do for the benefit of each and every member, and for the preservation of the welfare of the public.

The fact that in each county one man is largely responsible for the dissemination of this information, was brought out in a very decided form at the meeting of county secretaries, held in San Francisco on January 18 of this year. The future of membership and of organization of the California Medical Association very largely is the responsibility of the secretaries of the component county medical societies.

Respectfully submitted,
E. Vincent Askey, *Chairman.*

COMMITTEE ON POSTGRADUATE ACTIVITIES

Executive Group

Clarence G. Toland, Chairman, 1938
F. F. Gundrum, 1936 John C. Ruddock, 1937
The Secretary, ex officio

To the President and the House of Delegates:

Your Committee on Postgraduate Activities, under the auspices of the California Medical Association, begs to report that the postgraduate activities, as ordered by the House of Delegates at Yosemite, are now firmly established.

During the past year there have been twelve conferences held in the following places: Riverside, San Bernardino, Modesto, Stockton, and San Jose.

Of course, this is pioneer work in this State, and will require some time to arouse the interest of the members of the component county societies. Your committee wishes to suggest that the brochure or announcement be very specific, and descriptive of clinics that are available to the various districts. For example:

"Diseases of the Blood.—Demonstration and discussion of cases of blood dyscrasias. Presentation of criteria for differential diagnosis of agranulocytopenia, purpura hemorrhagica, pernicious anemia, secondary anemia, leukemias, and bone-marrow deficiencies. A description of technique of bone-marrow punctures. Demonstrations of typical blood smears for microscopical diagnosis. Treatment of blood dyscrasias and application of various types of treatment to the cases demonstrated. Value of blood transfusions and x-ray as a therapeutic measure. Drug therapy. Liver therapy. Endocrine influence."

"When selecting this course it should be stated whether the entire subject is to be covered or whether the group desires only a part of the subject.

"The following doctors are available for this clinic:

M.D., San Francisco, University of California.
M.D., Sacramento, private.
M.D., Los Angeles, University of Southern California.
M.D., San Diego, private.
M.D., Los Angeles, College of Medical Evangelists.
M.D., San Francisco, Stanford.

"It is expected that patients with case records will be available for demonstration."

The entire announcement should be enlarged and made very specifically descriptive. This will materially help in the selection of suitable cases for demonstration, and also assist in the suitable selection of clinic courses.

It is essential that the announcement be printed on good paper, with an attractive cover, and that copies be made available through all medical groups in the rural communities of the State.

Secondly, it is desired by the medical profession adjoining San Francisco and Los Angeles that the clinical material of the San Francisco County Hospital and the Los Angeles County Hospital be made available to them at least once a year by means of a clinical demonstration, conducted jointly by the medical schools in San Francisco and Los Angeles, respectively, under the auspices of the California Medical Association.

Your committee has been hindered to some extent in advising the different county societies as to the value of the postgraduate conferences, because some of us are members of the Committee on Medical Exhibits at the San Diego Fair. Most of our available time has been given to this important matter, as it was very essential to complete the exhibit in as short a time as possible. I feel certain that next year some of us will be able to visit the different county medical societies in reference to the subject of postgraduate conferences.

We appreciate greatly the opportunity to serve the California Medical Association in this capacity.

Respectfully submitted,
Clarence G. Toland, *Chairman.*

COMMITTEE ON PUBLICATIONS

Executive Group

Percy T. Magan, Chairman, 1937
Ruggles A. Cushman, 1938 — Oscar Reiss, 1936
The Editor, ex officio — The Secretary, ex officio

To the President and the House of Delegates:

Your Committee on Publications is grateful that, in spite of the national financial stringency producing lessened income from advertising sources, our official journal has been enabled to bring to all physicians in the State its continued messages of progress relative to scientific and organized medicine. We are glad to say that it is very rare that a written communication is received containing criticisms of CALIFORNIA AND WESTERN MEDICINE. This indicates that the constituency of the California Medical Association must be persuaded that the official publication presents with fairness and credit the activities of the Society as regards both their professional and organization work.

During the year that is past the editor submitted to us his plans to emphasize the organization activities of the Association by changing the position of the editorial section in the JOURNAL from the middle thereof to that of the initial pages of each issue, and to further call attention to the topics under discussion by the use of blackface subheadings. Naturally enough, the committee was in hearty accord with this plan, and it is our belief that the new form makes for better appearance as well as serving a distinct and valuable purpose in enabling the readers to more easily acquaint themselves with the current organizational problems that are of importance to the Association and its component county societies.

In these days of stress and strain and social-welfare activities it will be clear that there are many problems confronting the medical profession, and that solutions in whole or in part must be found if the interests of the doctors as individuals and as a professional group are to be properly safeguarded. Because of this it is more apparent than ever that there must be a printed means of intercommunication to carry the messages from the State associations and the component county societies to all members of the California Medical Association. Without this it would be practically impossible to secure anything like unanimity of thought and action. Certainly, at the present time such harmonious agreement on what is to be done and the manner in which certain ends are to be attained is vital in order that the energy of the Association be not side-tracked or neutralized through unnecessary or avoidable argument or differences of opinion among its members.

As in previous reports, your Committee on Publications is of the opinion that CALIFORNIA AND WESTERN MEDICINE stands in the front rank of the column of official publications as issued by other state medical associations, and reflects great credit upon the doings of the California Medical Association.

It is our understanding that the editor in his report will advise a temporary increase in the number of pages of CALIFORNIA AND WESTERN MEDICINE in order to permit the early printing of papers read a year ago at Yosemite. To this we give our hearty approval and trust that the House of Delegates will so authorize.

In closing, we bespeak for CALIFORNIA AND WESTERN MEDICINE the kindly and hearty support of the House of Delegates and the Council. This has been graciously accorded in the past, and we are sure that our official publication is doing better work today than in any period of its history. It is without controversy that CALIFORNIA AND WESTERN MEDICINE is destined to play a fundamentally vital part in the promotion and forwarding of the policies of the California Medical Association.

Respectfully submitted,
Percy T. Magan, *Chairman.*

COMMITTEE ON PUBLIC POLICY AND LEGISLATION

Executive Group

Junius B. Harris, Chairman, 1938
Fred R. DeLappe, 1936 — E. T. Remmen, 1937
The President, ex officio — The President-elect, ex officio

To the President and the House of Delegates:

At the time of our report one year ago we were in the midst of a legislative session. Many of our members have heard detailed accounts of what transpired at that session through reports presented at meetings of our component county societies. However, a brief summary is in order at this time as an indication of some of the problems facing us in the near future.

The legislature was in session for a total of 161 days. From early January until midnight of June 16, 1935. This is an all-time record in length of session, and there was also an all-time record in the number of bills introduced—3,951. It was necessary for your representatives to go through all of these 3,951 bills, carefully scanning each one, and pick out those dealing with questions of professional standards and public health. We found 208 bills with some reference to public-health questions. In addition to these bills there were more than five hundred skeleton bills, which required constant, daily watching. Some of these did develop into rather pressing issues.

There were twenty-four committees before which public health measures were considered. These committees were in session from early morning until midnight, and it was necessary for your representatives in Sacramento to not only watch carefully the procedure in these committees, but to keep a thorough check on all legislative activities. This was almost a twenty-four-hour-per-day job.

A brief summary of some of the bills follows:

Assembly Bill 2401, the so-called "Humane Pound Act," was with us again. It was tabled in committee after we had presented data showing that the same forces active

in its support were also active in antivivisections societies. An attempt to lift it from the table by a vote of the general body of the Assembly was decisively defeated. The proponents of this measure made good their threat to "take it to the people," and are now circulating petitions to place this measure upon the ballot next November as an initiative proposition. Their literature states that they have the necessary funds to circulate the petitions.

A series of four chiropractic bills died in committees without reaching the floor of the legislature.

In our report one year ago we called attention of our members to "county medicine" as one of the most important issues of the legislative session, warning that attempts would be made to "open up" county hospitals. Assembly Bill 2397, introduced by Mr. Heisinger of Fresno County, attempted to establish a system of "county health insurance" through county hospitals. Defeated in its original form the bill was amended to provide for "hospital districts," to be set up by boards of supervisors. After many hearings the bill failed by the narrow margin of two votes to get out of committee and onto the floor of the Assembly. In an attempt to regulate county hospitals your Council ordered the preparation and introduction of Assembly Bill 954. This was vigorously opposed by farm groups, labor groups, representatives of county supervisors, and was defeated in committee.

Senate Bill 454 and Assembly Bill 1097, providing for systems of compulsory health insurance, were given extensive hearings by committees and finally referred back to these committees without action by the Senate or the Assembly. Special committees were named by both the Senate and the Assembly to continue the study of this subject and report at the next session of the legislature, which convenes on January 4, 1937.

Senate Bill 471 was the most vigorously contested measure of the entire session. It related to medical and hospital service insurance. It was given strong backing, and for over three weeks was a hotly-contested issue before the Assembly. It was only through the splendid coöperation of our members in the various legislative districts of the State that the assemblymen were informed of the true nature of the measure when amendments were adopted that removed the vicious features of the bill. It was then withdrawn by its sponsors.

The State Board of Medical Examiners secured the introduction of Senate Bills 154, 155, and 468. These had to do, respectively, with some changes in the definition of "unprofessional conduct," graduates of foreign medical schools, and providing for injunctions against violators of the Medical Practice Act. All three bills passed the legislature with practically no opposition, but only one—the foreign graduate bill—was signed by the Governor. The others were given a pocket veto.

Two bills of particular concern to the public were Assembly Bills 1918 and 2158, having to do with inspection of patients' records by attorneys in pending or contemplated court actions. We opposed these on the grounds that they were in violation of the relationship between patient and physician. They were killed once in committee, but were revived and had to be defeated a second time.

Assembly Bill 1037 would have placed x-ray laboratories under supervision of the State Board of Health. This was amended a number of times to meet objections, and finally passed through the legislature with but little opposition. However, the Governor gave it the pocket veto.

These are just a few of the highlights of a legislative session that was exceedingly important from the standpoint of the public health and the protection of professional standards.

Since the legislature adjourned we have caused detailed reports to be presented at fifty-three meetings of members of our profession or allied groups in an attempt to arouse a realization of the necessity for active interest in public health legislation. Many of the issues referred to above will again be before the legislature. The question of "county medicine" is particularly pressing with numbers of farm groups and labor groups committed to a program of "public hospitalization."

This is election year. The primary election will be held in August, and the general election in November. Under provisions of a new law all voters must re-register. May we urge that all our members register to vote, and make certain that members of their families, their employees, and friends are registered; that our members contact candidates for the legislature, discuss with them the various problems of public health legislation and give them the advice and information that legislators so repeatedly seek, in order that they may act intelligently for the best interests of the public.

Respectfully submitted,

J. B. Harris, *Chairman.*

COMMITTEE ON SCIENTIFIC WORK

Executive Group

Frederick C. Warnshuis, Chairman
J. Homer Woolsey, 1938 — Lemuel P. Adams, 1937
F. M. Pottenger, 1936 — John C. Ruddock, ex officio
H. Glenn Bell, ex officio

To the President and the House of Delegates:

The scientific program, as published, summarizes the work of your Scientific Committee, which is of the opinion that the program reflects scientific progress and affords educational opportunities.

Your committee, in conference with section officers, gave serious consideration to the problems that arise by reason of the expansion of our program and the very marked interest and increase in attendance at our annual meetings, and recommend that the number of sections be reduced. There are two important factors: (1) Finding satisfactory auditoriums to accommodate the several sections. (2) Assigning session hours to the twelve scientific sections. Another factor, though not the responsibility of this committee, is the selecting of a place for our annual meeting that will afford ample hotel accommodations for those desiring to attend, and auditoriums for section meetings and exhibits.

This problem has been referred to the Council, with the recommendations that the Council study the problem.

Your committee tenders its appreciation and thanks to our invited guests and section officers, and to those members who are contributing to the success and value of this program.

Respectfully submitted,

F. C. Warnshuis, *Chairman.*

COMMITTEE ON PUBLIC RELATIONS

Charles A. Dukes, Chairman, Cancer Commission.
Fred B. Clarke, Chairman, Committee on Health and Public Instruction.
Morton R. Gibbons, Chairman, Committee on Industrial Practice.
Junius B. Harris, Chairman, Committee on Public Policy and Legislation.
Daniel Crosby, Chairman, Committee on Hospitals, Dispensaries and Clinics.
E. Vincent Askey, Chairman, Committee on Membership and Organization.
John H. Graves, Chairman, Committee on Medical Economics.
Robert A. Peers, ex officio, President of California Medical Association.
Edward M. Pallette, ex officio, President-elect.
Frederick C. Warnshuis, Secretary.
Hartley F. Peart, Attorney, Legal Counsel, California Medical Association.

To the President and the House of Delegates:

While your committee has conveyed to the membership, from month to month, through the Department of Public Relations in CALIFORNIA AND WESTERN MEDICINE, salient features of its scope of activity, these are now summarized for the information of delegates and members. This report concludes with certain recommendations.

I

Your committee recognized the need of conveying to the lay public definite and authentic information related to medical services and the scientific resources our medical profession possesses for the prevention of disease, conservation of health, and the alleviation of physical ailments and deformities. Evidence was at hand that the public was not informed in satisfactory degree as to measures and scientific methods that are attainable for its best physical welfare. It was further recognized that this lack of knowledge was a fundamental factor in causing lay persons to consult unqualified advisors. The course to follow to ob-

tain competent medical advice and care was a darkened path to many average individuals.

Your committee, therefore, devoted its work to remedying this situation, and addressed its efforts along the following avenues:

(a) *Press Publicity.*—A press release article was sent weekly to some 250 newspapers in California. These articles were educational, advisory, and informative. They presented facts related to preventive medicine, physical defects and degenerations, first aid, emergencies, and approved methods and measures of treatment. It has been gratifying to learn through a press-clipping service a very satisfactory publication of these articles, especially by the newspapers in less populated centers, thereby supplying to these readers often their only authentic source of information. It is further gratifying to report a gradually increasing number of letters of inquiries that have been received in response to these articles.

Supplementing this educational program, unstinted credit is given to the radio broadcasts sponsored by the Los Angeles County Medical Association, San Francisco County Medical Society, Kern County Medical Society, and several other component units. All these units deserve and are accorded well-merited credit and appreciation.

(b) *Fairs.*—In former years, our Association has sponsored educational exhibits at the State and Los Angeles County fairs. The conclusion was reached that these exhibits exerted but a limited educational influence. Upon mature deliberation it was determined to abandon such exhibits and replace them by conducting a series of visualized education by means of exhibits in the form of Public Health Institutes sponsored by county units. Our director was instructed to prepare such exhibits and arrange an itinerary. Some $2,000 was expended, and the first Health Institute was conducted in Oakland. A state-wide itinerary was prepared, but was temporarily abandoned because an opportunity presented itself to use these exhibits in the San Diego Exposition. It is contemplated to resume this educational program in the fall.

(c) *San Diego 1936 Exposition.*—By reason of the initiative of the San Diego County Medical Society, we were accorded the opportunity to join with that constituent unit in sponsoring, directing, supervising, and censoring a Hall of Medical Science in the 1936 San Diego Exposition. With Council approval, and with a state committee, of which Dr. C. G. Toland is chairman and Dr. Lyle Kinney local chairman, the Director of Public Relations contacted the Exposition management. Suffice it to state that a building with 22,000 square feet of space in the Exposition grounds was placed at our disposal as a Medical Hall of Science, and is now open to Exposition visitors. Members are urged to visit this building, which contains a goodly number of exhibits that are being featured in the Exposition's publicity.

It may not be amiss to state at this time that plans are under way and arrangements are being made to sponsor a similar Hall of Medical Science for the 1938 San Francisco Exposition.

II

COÖPERATION WITH GOVERNMENTAL AND LAY AGENCIES

Surveying other fields that afforded opportunities for contributing to public and professional welfare, it was perceived that our governmental and lay agencies created avenues for extension work. Under committee approval, our director approached, established contact and subscribed coöperation with the following agencies:

Department of Education
Board of Medical Examiners
Board of Health
State and Federal Forestry Departments
Highway Traffic
State Institutions
Milk Commission
State Chamber of Commerce
Parent-Teachers' Association
Federation of Women's Clubs
Junior League
Y. W. C. A.

It is not possible to cite specific and detailed tangible results from these contacts. Your committee, however, is confident that desired ends are being given to the medical profession as an important and vital group in all civic movements, and that wholesome influence is being acknowledged. Our correspondence from these agencies justifies this conclusion.

III

Hospital Insurance Plans.—When the 1935 Legislature enacted Assembly Bill 246 authorizing nonprofit corporations to write hospital service insurance, the Council delegated to the Committee on Public Relations the study of this law's provisions and to make recommendations as to related Association policies and participation. After much study and investigation, and a conference by our director with Washington and Oregon operations of similar plans, the committee formulated the following conclusions which were approved by the Council:

1. It was not advisable for our Association to establish a hospital insurance plan for state-wide application.

2. That our Association assume a supervisory rôle and make available advisory service to any hospital or group of hospitals contemplating establishing hospital insurance.

3. That the following provisions must be incorporated in any hospital insurance proposal:

(*a*) Free choice of hospital.

(*b*) Free choice of an accredited physician.

(*c*) Medical care or services are not to be included.

(*d*) That laboratory diagnostic services constitute the practice of medicine.

(*e*) That the diagnostic specialties in medicine cannot be divided into professional and technical divisions.

(*f*) That benefits shall be those of hospital services only, and exclusive of medical services.

To bring about the recognition and acceptance of these vital principles, conferences were arranged and held with chiefs of staffs, hospital representatives, and committees from diagnostic specialties. Progress is being made, and it is anticipated that agreeable, mutually acceptable principles and policies will eventuate.

Your committee, while endorsing the principle and purpose of hospital insurance, recognizes that our Association must be alert to the possible avenues along which expansion may take place. It is purposed to resist expansion that would include medical care.

IV

Lay Meetings.—Effort has been unsuccessfully made to enroll a corps of speakers from county members in order to make available to lay groups, luncheon clubs, and parent-teacher organizations, speakers capable of presenting medical discussions. Members have been reluctant to volunteer for such assignments. The quest will be to perfect such service during the coming year. As a substitute for this function, our director during unengaged periods has addressed the following groups:

San Francisco Y. W. C. A.
San Francisco Executives' Organization
Occidental College Economic Conference
Several Rotary Clubs
Senior students of Stanford and University of California.

Conferences were also had with health committees of lay state organizations.

V

Miscellaneous.—During committee meetings, consideration has been given to and plans are being developed that will record the following features:

1. A series of educational leaflets for distribution with gas and electric bills.

2. A series of cards for distribution to patients and office display.

3. Participation in programs of state lay organizations.

4. A program for women's medical society auxiliaries.

5. Information bureau.

6. Bibliographies of medical subjects for public libraries.

In presenting this report of action and citing expansion objectives, your committee is of the opinion that it is meeting and fulfilling the purposes and functions that were assigned.

In conclusion, the following recommendations are made:

1. That county societies be requested to appoint local committees on public relations to initiate in their respective localities all of the central committee's activities.

2. That county societies make available a corps of speakers for assignment to address lay meetings.

3. That the committee's future plans be approved.

Respectfully submitted,

C. A. Dukes, *Chairman.*

V

REPORTS OF COMMISSIONS, SPECIAL AND COUNCIL COMMITTEES

AUDITING COMMITTEE

Executive Group

Karl L. Schaupp, Chairman

Morton R. Gibbons — O. D. Hamlin

To the President and the House of Delegates:

In compliance with the provisions of the by-laws, we submit a draft of the 1936–1937 budget.

BUDGET—1936-37

Estimated Income:		
1. Membership dues—5,400	$54,000.00	
2. Earned interest	50.00	
3. Herzstein Fund	750.00	
4. Advertising sales	25,000.00	
5. Commissions	500.00	
6. California and Western Medicine subscriptions	500.00	
7. Reprint sales	1,000.00	$81,800.00
Estimated Expenses:		
(*a*) Public Relations	$ 2,500.00	
(*b*) Postgraduate conference	1,500.00	
(*c*) Legislative expenses	5,000.00	
(*d*) Committee expenses	1,000.00	
(*e*) Legal expenses	5,000.00	
(*f*) Public health institutes	1,500.00	
(*g*) Annual meeting	750.00	
(*h*) Delegates to American Medical Association	750.00	
(*i*) Council expense	1,500.00	
(*j*) Executive Committee expense	500.00	
(*k*) Printing California and Western Medicine	25,000.00	
(*l*) Editor's salary	4,000.00	
(*m*) Clerical expense, official journal	3,000.00	
(*n*) Rent	2,500.00	
(*o*) Telegraph	300.00	
(*p*) Stationery—Certificates and reports	1,000.00	
(*q*) Postage	1,000.00	
(*r*) Office supplies	250.00	
(*s*) Typewriters	500.00	
(*t*) Express and cartage	100.00	
(*u*) Clerical office assistants	6,000.00	
(*v*) Travel expense	1,500.00	
(*w*) Transfer files	250.00	
(*x*) Department of Public Relations, salary	5,000.00	
(*y*) Secretary's salary	7,500.00	
(*z*) Reserve	2,900.00	$81,800.00

BUDGET—1935-36

Estimated Income:		
1. Membership dues—5,200	$52,000.00	
2. Earned interest	100.00	
3. Herzstein bequest	750.00	
4. Advertising income	20,000.00	
5. Commissions	500.00	
6. California and Western Medicine subscriptions	500.00	
7. Reprint sales	1,500.00	
8. Sales of books	180.00	
9. Estimated income		$75,530.00
Estimated Expenses:		
10. Public Relations	$ 1,000.00	
11. Postgraduate work	1,500.00	
12. Legislative expense	4,400.00	
13. Committee expense	1,000.00	
14. Legal expense	6,000.00	
15. Fair exhibits	1,000.00	
16. Annual meeting	1,000.00	
17. Delegates, American Medical Association	1,500.00	
18. Woman's Auxiliary	150.00	
19. Council travel expense	750.00	
20. Executive Committee travel expense	500.00	
21. Printing California and Western Medicine	20,000.00	
22. Editor's salary	4,000.00	
23. Journal assistance	2,800.00	
24. California and Western Medicine miscellaneous	500.00	
25. Rent	3,500.00	
26. Telegraph	300.00	
27. Stationery supplies	1,000.00	
28. Postage	750.00	
29. Office supplies	250.00	
30. Express and cartage	100.00	
31. Stenographic services	6,000.00	
32. Travel expense	1,200.00	
33. Office files	250.00	
34. Director of Public Relations, salary	4,000.00	
35. Secretary's salary	6,000.00	
36. Publicity estimate	3,000.00	
37. Reserve	6,080.00	
38. Estimated expenses		$78,530.00

COMMENTS ON BUDGET FOR 1936-1937

1. In last year's budget we estimated the membership dues on the basis of 5,200 members, whereas we had a gain in membership, making a total of 5,347 members. I estimate that during the coming year, due to our visits to county societies and the activities of the officers of the Association, an increase of at least two hundred members over last year.

2. Our funds have been depleted. We have only a small amount of money in the savings account, so our income from interest accrued will be materially reduced.

3. The Herzstein Fund is a fixed figure.

4. Last year I estimated the advertising sales as approximately $20,000. By reason of advertising campaigns, the advertising in 1935 reached the figure of $23,000. I, therefore, estimate that our advertising sales for 1936 will be $25,000, and I feel that possibly it will exceed that amount because every month we are securing new contracts.

5-6. These are conservative estimates based on past years.

7. You will recall that I introduced this figure last year, based upon the Association taking over the sale of reprints of articles appearing in California and Western Medicine. I made a definite agreement with the James H. Barry Company for the printing of reprints and furnishing them to the authors. During this past year our profit was approximately $700, and that amount can be increased to the amount indicated on the proposed budget.

EXPENSES

(*a*) The Committee on Public Relations should have this appropriation because of its activities. You will recall that it has assumed the press publicity activity, and this has been accomplished at a very small cost and with a large saving over the proposal which was made at Yosemite for a publicity director with an appropriation of $5,000. I feel, therefore, that with the other activities of the Public Relations Department an appropriation of $2,500 is a just one.

(*b*) Our Postgraduate Conferences will perhaps not exhaust this appropriation; but this amount should be made available for the plans the committee has in mind.

(*c*) Legislation expenses are placed at this figure to cover the activities of the Legislative Committee, but do not cover any special legislative work.

(*d*) This amount is to cover the expenses of our Standing Committee, and I see no reason why it should be increased for the coming year.

(*e*) Our legal counsel has a retainer of $4,000, and $1,000 should cover any extra expenses.

(*f*) Public Health Institutes, the first of which was conducted this past month, supplant the former expenses that were incurred at the State Fair and also at the Los Angeles Fair.

(*g*) I have tentatively fixed this figure as expenses for our annual meeting, because I am not sure whether we will again be able to duplicate our 1935 experience whereby the return from rental and exhibit space not only paid all the expenses of the annual meeting, including the traveling expenses of the officers of the Association and guest speakers, but netted us a profit of a little more than $700.

(*h*) The American Medical Association meets in Kansas City in 1936 and, therefore, the traveling expenses of the delegates will not be as large this year as last, when they had to travel to Atlantic City.

(*i*) Are supplementary, and cover the expenses of the Council and the

(*j*) Executive Committee.

(*k*) This is a conservative estimate of the publication costs of CALIFORNIA AND WESTERN MEDICINE, and cannot be reduced.

(*l*) This is a fixed figure.

(*m*) This is a fixed figure.

(*n*) This is a fixed figure.

(*o*) This is an estimate based on previous tabulations.

(*p*) This sum covers the necessary office stationery—for correspondence, for membership certificates, envelopes, report-blanks, etc.

(*q*) This is a fixed figure based on the experience of the past year.

(*r*) Includes the minor office supplies, such as pens, pencils, clips, loose-leaf blanks for ledgers, etc.

(*s*) Is a necessary expenditure, because the typewriters in the office are in very poor condition; they are old and practically worn out, so that we will undoubtedly have to purchase at least three new typewriters during the coming year.

(*t*) This is a fixed figure.

(*u*) This is a fixed figure, under appropriations that have been made.

(*v*) This is for the traveling expenses of the secretary, and while the amount will not be consumed, it is arbitrarily so indicated.

(*w*) Files in the office are filled, and it will be necessary to purchase transfer files that can be secure for that amount.

(*x*-*y*) Of course, these sums are subject to the action of the Auditing Committee and the Council, and are placed at that amount in conformity with the understanding that was had with Doctor Toland and his committee.

(*z*) Is self-explanatory.

There is under consideration the question of sponsoring a law for a qualifying certificate. An estimate has been made for the cost of securing such initiative in the neighborhood of $35,000. If the Council determines to proceed with that project, then it will be very necessary for the Council to consider increasing the membership dues to $15 per year, and submit this proposal to the House of Delegates. If the dues are raised, it will bring an added revenue of $27,000. I merely mention this in order that the Auditing Committee may give consideration to this financial problem and make its recommendations to the Council.

Respectfully submitted,

Karl L. Schaupp, *Chairman.*

CANCER COMMISSION

Executive Group

Charles A. Dukes, Chairman
Lyell C. Kinney, Vice-Chairman
Alson R. Kilgore, Secretary
Orville Meland, Secretary for Southern Section

Harold Brunn — Gertrude Moore
Henry J. Ullmann — A. Herman Zeiler
Clarence G. Toland

To the President and the House of Delegates:

During the current year the Cancer Commission has undertaken to coöperate with the American Society for the Control of Cancer in a sustained program of public education. Plans are now (March) being made, and it is expected that work will shortly be begun.

The Council authorized reprinting the Cancer Commission studies in book form, at a low price, for general sale, through agreement with J. W. Stacey, Inc. Printing is now in progress, and it is expected that the book will be ready for exhibit at the San Diego meeting.

Respectfully submitted,

C. A. Dukes, *Chairman.*

COMMITTEE ON ARRANGEMENTS—ANNUAL SESSION

C. O. Tanner, Chairman

Harold D. Barnard — Ralph Kaysen
C. B. Bernardini — R. C. Launsberry

To the President and the House of Delegates:

Most all of the arrangements for the coming meeting at Coronado have been perfected through the office of the state secretary. Our committee has no report of action taken, but is ready at all times to be of assistance at the time of the annual meeting. We have checked over the plans with the management of the Coronado Hotel and other San Diego hotels, and feel that there will be ample accommodations, meeting rooms, etc.

The Exposition will be open, and Tuesday, May 26, has been officially designated as California Medical Association Day.

Respectfully submitted,

C. O. Tanner, *Chairman.*

COMMITTEE ON DISCIPLINARY PROCEDURES

Executive Group

W. W. Roblee, Chairman

L. A. Packard — C. Kelly Canelo
Oscar Reiss — E. Vincent Askey

To the President and the House of Delegates:

The committee has held several meetings and, in consultation with the Council and our attorney, a by-law will be presented to the House of Delegates which, if it is adopted, will assure uniform, orderly procedure in these cases.

PROPOSED AMENDMENT TO THE BY-LAWS OF THE CALIFORNIA MEDICAL ASSOCIATION GOVERNING DISCIPLINARY PROCEDURE FOR COMPONENT COUNTY MEDICAL SOCIETIES

Introductory Note: The following amendment to the California Medical Association by-laws is drafted in compliance with the recommendation of the Committee on Discipline and Ethics of the California Medical Association. In order to effectuate a harmonious result, and in order that the by-laws as amended may not lack organization, the following amendments take the form of, first, an outright repeal of Sections 2 to 5 inclusive of Chapter II of the by-laws of the California Medical Association and, second, a substitution therefor of new Sections 2 to 5 inclusive of Chapter II, incorporating sections governing disciplinary procedure in the component county societies as well as disciplinary procedure in the California Medical Association itself. This method makes the amendment somewhat bulky, but in the end it will avoid a great deal of the confusion that would necessarily arise if specific new sections should be added to Chapter II without regard to the resultant lack of organization.

AMENDMENT NO. 1

Chapter II of the by-laws of the California Medical Association is hereby amended by striking out "Chapter II—Membership" and inserting in lieu thereof, the following: "Chapter II—Membership (Including Procedure on Loss of Membership)."

AMENDMENT NO. 2

Chapter II of the by-laws of the California Medical Association is hereby amended by striking out all of Sections 2, 3, 4, and 5 of said Chapter II and by inserting in lieu thereof the following:

SECTION 2. TERMINATION OF MEMBERSHIP

(a) *By Expulsion from Component County Society.*—Expulsion from any component county society after due proceedings in accordance with those by-laws, upon becoming final, terminates all the rights and privileges in this Association of the member so expelled.

(b) *By Failure to Pay Dues.*—If the annual assessment of dues payable to this Association by any member of this Association is not paid on or before April 1 of any year, such member shall automatically lose his membership in this Association as of April 1 of such year. The Council of the Association, in its discretion, upon payment of such unpaid dues, and any other assessments, or dues accruing thereafter, may at any time reinstate such member.

(c) *By Revocation of Physician and Surgeon's Certificate.*—Any active member whose license to practice medicine and surgery in the State of California is revoked shall, upon the receipt of sufficient written evidence of such revocation and of its legal finality by the secretary of this Association, thereupon cease to be a member of this Association.

(d) *Acts and Conduct Subjecting Member to Censure, Suspension or Expulsion by Component County Society.*—Any active member of a component county society who has been adjudged guilty of a criminal offense involving moral turpitude, or who has been duly adjudged guilty by his society, in accordance with the procedural requirements of these by-laws, of gross misconduct as a physician or a surgeon or of a violation of any of the provisions of the constitution or by-laws or principles of professional conduct of his society or of the principles of medical ethics promulgated from time to time by this Association or by the American Medical Association, shall be subject to censure, suspension or expulsion from his society by such component county society.

(e) *Right of Committee on Membership and Organization of this Association to Prefer Charges.*—If a member of this Association is believed by the Committee on Membership and Organization of this Association to be guilty of conduct justifying censure, suspension or expulsion from his component county society, said committee may prefer written charges in the form and in the manner hereinafter specified with the secretary of the accused member's county society and may, through a member or members thereof, perform all acts that are reasonably necessary and proper in the prosecution of such charges.

SECTION 3. PROCEDURE TO BE FOLLOWED BY COMPONENT COUNTY SOCIETIES WITH RESPECT TO INVOLUNTARY LOSS OF MEMBERSHIP

(a) *Disciplinary Procedure for Component County Societies.*—The procedure to be followed by each component county society with respect to the censure, suspension or termination of membership of a member thereof shall be:

(1) *Charges—Formal Requirements.*—A formal charge must first be made. Such charge must be in writing, signed by the accuser, and if made by a person other than a member of the Society must be sworn to before an officer of the State of California authorized to administer oaths. Charges must state the acts or conduct complained of with reasonable particularity.

(2) *Charges—Filing—Secretary's Duties—Presentation to Board of Directors (or Grievance Committee).*—Charges must be filed with the secretary of the accused member's society. At the first regular or special meeting of the Board of directors of such component county society held after charges are filed, the secretary must present said charges to the Board. The Board of Directors shall then or at any adjournment of said meeting, but not more than thirty days after the date of such regular or special meeting, consider the charges, and in its discretion determine whether or not further proceedings shall be conducted. If the Board determines that no further action shall be taken, the charges shall be dismissed.

If a component county society has no Board of Directors and more than ten members, its members must, at a regular meeting of the society, elect a grievance committee of not less than five (5) active members in good standing, two members shall be designated by the society to serve for a period of one year, two members shall be designated to serve for a period of two years, and one member shall be designated to serve for a period of three years. At the expiration of the terms of office of the respective members of such committee, successors shall be elected in like manner to serve for a period of one year each. Such grievance committee shall exercise all the powers and perform all of the duties herein conferred upon boards of directors in the manner and within the times herein provided. If a society has less than eleven members, the entire society, exclusive of the accuser and accused, shall constitute the grievance committee. All references herein to boards of directors shall be deemed to include boards of councilors, grievance committees, and component county societies of ten members or less.

(3) *Service of Charge Upon Accused.*—If the Board of Directors determines that further action, with respect to said charges, shall be taken, the Board must within fifteen (15) days after such decision cause a copy of the charges to be served upon the accused by personally delivering a copy thereof to him, or by depositing a copy thereof in the United States mail, registered and addressed to the accused either at his last known office or at his last known residence.

(4) *Time and Place for Hearing—Service of Notice Thereof.*—The Board of Directors shall, at said meeting at which its decision to proceed is made, fix a time and place for a hearing of said charges. Written notice of the time and place set for the hearing shall be served upon the accused within fifteen (15) days by personal delivery or registered mail. The time so set for a hearing shall be not less than fifteen (15) days after the accused has been served, as aforesaid, with a copy of the charges and with the notice of the time and place set for the hearing; said hearing must be held within the county in which the accused holds his county society membership. The hearing before the Board of Directors must actually commence within *six months* from the date of the filing of written charges. Failure to comply with this requirement shall constitute an automatic dismissal of the charges.

(5) *Right of Accused to Answer—Time to Answer—Formal Requirements.*—The accused may, not less than five (5) days before the time set for a hearing, answer said charges. The answer shall be in writing and the original and three copies shall be filed with the secretary of the society, provided, however, that the failure of the accused to answer shall not be deemed to be an admission of the truth of the charges or a waiver of the accused's right to a hearing with respect to said charges.

(6) *Rules Governing Hearing—Duties of Referee of Society—Advice as to Procedure Only.*—The Board of Directors shall give ample opportunity both to the accuser and the accused to be heard in person and to present all testimony, evidence, or proofs which the accuser or the accused may deem necessary, provided that the Board may reject all testimony, evidence, or proofs which in the judgment of the Board are immaterial, irrelevant or unnecessarily repetitious. Neither the accused nor the accuser shall be represented by an attorney at law. The Board in its discretion may be represented by a referee, who, may, but need not, be a member of this Association, and who shall be appointed by the Council or Executive Committee of this Association, to advise the Board, the officers of the society, the accuser and the accused, with respect to procedure only. It shall be the duty of said referee to answer all procedural questions submitted by said persons and, on his own initiative, to call attention to any procedural errors.

(7) *Record of Proceedings—Shorthand Reporter Discretionary—Duty of Secretary to Preserve Record—Right of Accused to Copy.*—The secretary shall preserve the original of said charges with a certificate of personal delivery or of mailing of a copy or copies thereof, as the case may be, the original notice of the time and place set for the hearing with a certificate of personal delivery or of mailing of a copy or copies thereof, as the case may be, and the original of the answer filed by any member accused if an answer be filed. At the hearing, the Board of Directors may, in its discretion, and at the expense of the society, employ a competent shorthand reporter to record and transcribe into typewriting testimony adduced on behalf of the accuser and the accused. If the Board shall decide not to employ a reporter, then the secretary of the society shall be present and shall keep and prepare a summary of all testimony adduced. The original charges with certificate of service thereof, the original notice of time and place for hearing with certificate of service thereof, the answer or answers, if any be filed, all documentary evidence introduced at the hearing, the typewritten transcript of the testimony or the secretary's typewritten summary, and the written decision of the Board of Directors shall constitute the record of the entire proceedings. The secretary shall, upon receipt of a sum sufficient to defray the cost thereof, cause a copy of such record to be transcribed and furnished to the accused. The secretary shall keep such record and, in the event of an appeal to the Council of this Association, shall upon due request of its secretary transfer said record to the Council.

(8) *Decision of Board—When Must Be Written—Rules Governing Vote of Board.*—The Board of Directors, after having given the accuser and the accused member full opportunity to be heard, shall conclude the hearing and shall render its decision in writing not more than thirty (30) days thereafter. Hearing shall include any oral arguments and the filing of any written briefs. The Board of Directors by a two-thirds affirmative vote of all of the eligible members of the Board present and voting may exonerate or may censure, suspend or expel the accused member as the facts in its opinion may justify. The failure of at least two-thirds of all the members of the Board of Directors present and voting to agree upon the disposition of the charges shall act automatically as a dismissal of the same. No member of the Board of Directors not present at the said hearings for the entire time thereof shall be entitled to vote with respect to the disposition of the charges.

(9) *Suspension—Maximum Period—Status of Suspended Member.*—If the Board of Directors shall determine to suspend an accused member, the term of such suspension shall be within the discretion of the Board, provided that in no case shall a member be suspended for a period greater than one year. A suspended member shall have no rights or privileges in the society, provided that at the expiration of the period of suspension such suspended member shall not be reinstated to membership in good standing until he applies for reinstatement and pays all dues accrued during said period of suspension.

(10) (a) *Board's Decision—Secretary to Send Copies.*—Within ten (10) days after the decision of the Board of Directors, the secretary of the society shall transmit a copy of the decision of the Board to the accused member or members and to the secretary of this Association.

(b) *Board's Decision Final—Subject to Appeal.*—The action of the Board of Directors of a component society shall be final, subject only to appeal to the Council of the California Medical Association in such cases as are provided in these by-laws.

(c) *Technical Rules of Evidence Not to Govern Disciplinary Hearings.*—All hearings with respect to the disposition of charges against a member of a component county society shall be held and conducted in such manner as to

ascertain all the facts fairly to the accuser and accused, eliminating all formal or technical rules and requirements which ordinarily pertain to judicial proceedings.

(d) *Members Agree That No Cause of Action Shall Accrue.*—Any person so charged, censured, suspended, or expelled shall have no claim or cause of action against this Association, a component county society or any member, director, councilor or officer, thereof by reason of such charges, or the hearing or the consideration thereof or censure, suspension or expulsion therefor.

(e) *Expelled Members — Right to Apply for Membership—When Accrues.*—Any person whose membership has been involuntarily terminated in a component county society by reason of violation of these by-laws may apply for membership after the expiration of one year from the date said membership was terminated, and such application shall be considered in the same manner as a new application for membership.

SECTION 4. PROCEDURE FOR APPEAL TO COUNCIL

A member of a component county society censured, suspended or expelled by his county society may appeal from the action of such component county society to the Council of this Association within the period of two months succeeding the date of such censure, suspension, or expulsion. Appeals shall be in writing and be filed within the said period of two months in the office of the secretary of this Association. Upon the filing of an appeal the secretary shall present it to the first subsequent meeting of the Executive Committee or the Council. Appeals shall be heard by the Council only after reasonable notice in writing of the time and place of the hearing of the appeal has been given to the appellant member and the president and secretary of the component county society.

SECTION 5. RULES GOVERNING APPEALS

In hearing appeals, the Council shall review all questions of procedure and may, in its discretion, review the evidence contained in the record of the original proceedings held before the Board of Directors of the component county society. The Council may make findings of fact contrary to, or in addition to, those made by said Board of Directors. Such findings may be based on the evidence adduced before said Board of Directors, either with or without the taking of evidence by the Council. The Council may, for the purpose of making such findings or for any other purpose in the interest of justice, take additional evidence of or concerning facts material to the questions involved, or may, for such purpose, appoint a committee of its members or any notary public to act as referees or referee for the taking of such additional evidence.

Such referee shall render a report in writing to the Council, which report shall contain a clear statement of the facts found by the referee from the testimony or evidence adduced.

The Council shall use any lawful means which in its judgment will best and most fairly present all the facts involved.

The Council may affirm, reverse or modify the decision of the Board of Directors or make such other disposition of the proceedings as it may deem proper.

In every case of an appeal the individual councilors and the Council, through a committee thereof, prior to any hearing being held upon the appeal, shall exert all proper efforts at conciliation and compromise.

Neither the appellant member nor the component county society shall be represented by an attorney at law. This Association may be represented by its attorney to advise the Council upon procedural questions only.

The decision of the Council shall be final and bind the appellant member and the component county society.

Respectfully submitted,
W. W. Roblee, *Chairman.*

COMMITTEE OF FIVE*

Executive Group

William R. Molony, Chairman
Harry H. Wilson — Robert A. Peers
Alson R. Kilgore — Rodney A. Yoell

To the President and House of Delegates:

The House of Delegates of the California Medical Association in session at Yosemite in June, 1935, voted to continue the Committee of Five, with instructions to complete the work and submit a final report at the meeting in Coronado in May, 1936. On July 24, 1935, a meeting of the Committee of Five was held in Los Angeles. This meeting was attended by Dr. Paul A. Dodd, director of the survey, and Dr. F. C. Warnshuis, secretary of the Association. As a result of this meeting an agreement was entered into and signed by Dr. Paul A. Dodd and the officers of the committee, a copy of which is attached herewith. This agreement, in effect, sets out that the Association has discharged its financial obligation to the survey. That an audit by a certified public accountant has been made, that Doctor Dodd be advised that the survey be terminated and that no further expense be incurred.

That when the activities and work of the Committee of Five and its director are concluded it is understood that those records and charts that were secured through funds obtained from the State Emergency Relief Administration are to be transferred to the proper officials or representatives of the State Emergency Relief Administration in accord with previous agreements.

Secondly, that all the information, facts, details obtained through questionnaires and other investigations that related to doctors, dentists, hospitals, and relief agencies, shall be the property of the California Medical Association and at their disposal, and in accordance with the instructions and action of the Council of the California Medical Association.

It was further agreed that Paul A. Dodd will complete and submit five copies of all the findings of the survey, his conclusions, the recommendations of the Advisory Council of Economists, as a final report to be submitted to the chairman of the Committee of Five on a day not later than September 15, 1935.

That the director, Paul A. Dodd, will on that date, or before that date, make available all of the records of the survey to the Committee of Five for such disposition as the State Department of Health and the State Emergency Relief Administration and the Council of the California Medical Association may determine and direct.

That such material will be subject to the final disposition of these above-named parties and will be stored as they may direct.

That the director, Paul A. Dodd, hereby agrees and guarantees that he will not incur, contract or obligate the Committee of Five on behalf of the California Medical Association or the State Department of Health or the State Emergency Relief Administration for any further obligations or expenses after July 26, 1935, and that in the event that he should contract or incur any additional expenses, he hereby specifically agrees to assume personal responsibility for such expenses and to defray them from his own personal funds.

That, in accordance with the foregoing, the director, Paul A. Dodd, acknowledges and understands that his services as director of the survey, or as agent of the Committee of Five, or as agent of the State Department of Health, or as agent of the State Emergency Relief Administration, will terminate and be ended as of noon of September 15, 1935.

Thereafter the quarters occupied by the survey staff were given up and all material taken charge of by Doctor Dodd, to be used by him in the writing and compiling of his report to the Committee of Five.

On September 16, 1935, a copy of the report of the survey was sent to each member of the committee. A copy was also sent to each member of the Advisory Council. This report was far from complete and in no sense was satisfactory to the committee or the Advisory Council.

A meeting of the Committee of Five was held in San Francisco on November 24, 1935, for the purpose of considering the report of the director. After a thorough discussion it was decided that Doctor Dodd be asked to submit a revised report and to furnish the committee with the report of the members of the Advisory Council. It was voted that a review and report be made by a competent person having a broad medical background.

Following this meeting Doctor Dodd sent to the office of the Association in San Francisco the schedules and all other material relating to the information obtained from physicians, osteopaths, hospitals, and dentists. The schedules and other data obtained from approximately 25,0000 families were retained by him on the theory that they were obtained through Government funds and did not, therefore, belong to the California Medical Association. This material properly belongs to the State Department of Public Health, as the agent of the Government, and

* The Special Committee of Five was appointed to supervise a survey of California morbidity and mortality, and their estimated costs. (See July, 1935, issue, pages 57 and 60.)

eventually will be called for through this agency. After many delays upon the part of the director in submitting the necessary final reports, the Council of the California Medical Association appointed an "accelerating committee," composed of T. Henshaw Kelly, E. M. Pallette, W. W. Roblee, to join with the Committee of Five for the purpose of pressing forward to an early conclusion the final report and recommendations of the committee.

A meeting of the two committees was held in Los Angeles on February 23, 1936. A full discussion of the entire matter, from its inception to date, was had. The matter of supplementary and critical reports was gone into. Dr. John B. Canning of the Advisory Council had already made a critical review of the entire report and, it appearing that he had made an offer to Doctor Dodd to take over the revamping and revising of the original final report, it was decided that further time be given the committee and Doctors Dodd and Canning to work out a satisfactory solution of the problem.

The combined committee, therefore, submit this condensed report of progress and frankly believes that further time is needed to adequately and satisfactorily digest the material on hand, to the end that finally a report may be submitted to this House that will fairly reflect the situation in California.

Respectfully submitted,

William R. Molony, Sr., *Chairman.*

SPECIAL COMMITTEE ON A QUALIFYING CERTIFICATE (BASIC SCIENCE) LAW

George H. Kress, General Chairman
Morton R. Gibbons, Chairman (for Bay Region)
Edward M. Pallette, Chairman (for Southern California)
Junius B. Harris, Chairman (for Remainder of State)

To the President and the House of Delegates:

Much to the regret of the Council and its special committee, it has not been possible to proceed, as had been planned, with the initiative providing for a qualifying certificate (basic science) law, which it was proposed to place on the State election ballot of November of the present year. The amendments to the California registration laws passed by the last legislature made doubtful the securing of the minimum of 186,000 valid and duly certified names of voters, with precincts, in time to be properly attested to the Secretary of State at least 110 days before the November election. The present plan is to submit the law as an initiative statute on the 1938 State election ballot.

The reasons why a qualifying certificate law passed by the legislature would be of little or no value have been given in previous reports of your committee. The entire subject was also considered in some detail at the Conference of County Society Secretaries held in San Francisco on January 18, last, and presented on page 221 of the March issue of CALIFORNIA AND WESTERN MEDICINE. Attention is also directed to the remarks of Dr. Junius B. Harris (printed on page 223), in which he points out some recent cultist legislation enacted in Arizona, from which source danger may be apprehended through the custom of reciprocity in case a similar law should be passed by the next California legislature. It will indeed be a surprise if such an effort is not made at Sacramento next spring. However, if cultist licensure legislation of a type so inimical to public health interests can be prevented at the next legislative session, then with careful planning the proposed initiative law for 1938 should not only be a probability, but become a fact. Your special committee, which has had the proposed measure under careful consideration for almost ten years, believes that the revised draft of the law submitted to the Council (the major provisions of which have already been outlined in reports and editorial comments in CALIFORNIA AND WESTERN MEDICINE) is a measure adapted to the needs of California, and one that will receive the hearty approval of the electorate of our State. Your committee, therefore, asks continued interest and support until the measure finds its place on the statute books of California.

Respectfully submitted,

George H. Kress, *Chairman.*

COMMITTEE ON SAN DIEGO EXPOSITION EXHIBITS

Executive Group

Clarence G. Toland, Chairman

W. W. Roblee	John C. Ruddock
Fred B. Clarke	Robert A. Peers
Edward M. Pallette	Frederick C. Warnshuis

To the President and House of Delegates:

Your committee on the scientific exhibit at the California Pacific International Exposition at San Diego is respectfully submitting to you, by your instructions, an analysis of what has been accomplished at the Fair.

Your committee is very grateful to Dr. William H. Geistweit, Jr., as Medical Director of Exhibits. He has worked unselfishly during the last three months, even to the detriment of his personal business. Men who have this enthusiasm are few. He has felt that this opportunity has been given to the regular medical profession in order that the public may better understand the problems which we encounter while administering to the sick. Also, that it is a triumph for regular medicine to exhibit the advances in medical sciences in a dignified way.

Your committee is just as enthusiastic in its thanks to the other members of the committee of the San Diego County Medical Society, and especially to Dr. Lyle C. Kinney. He also has given his time freely and with only one thought, that our "show" must be a success.

Attached hereto is the report from the committee of the San Diego County Society, that you may read it in full and so understand the difficulties encountered.

All the exhibitors were contacted by letter, telegrams, telephone, and many personally. The San Diego County Society committee has put us over the top, even though at times it seemed impossible because of lack of time. The work was done within three months, while other expositions or fairs have had one to two years to do the same thing.

We wish to thank all the exhibitors at this Fair for their contributions. We realize fully how difficult it has been, and hope that the next time they are called upon for similar assistance ample time will be given to them to avoid the many pitfalls that develop in assembling their exhibits.

Dr. John C. Ruddock has suggested that, because of the experience gained during the preparation of this scientific exhibit, the following plan be adopted for future reference:

1. That a planning commission be appointed by the Council of the California Medical Association.

(*a*) To adopt a theme or plan of exhibits.

(*b*) To determine the kind of exhibits, both commercial and otherwise, to fit the plan.

(*c*) To draw up blueprints and plans to be submitted to exhibitors, who will conform with requested policies of exhibiting.

2. That a committee on exhibits be appointed to effect the plans of the planning commission.

In order that such a scheme be put into effect, it is necessary that sufficient time be allowed in order to contact the various probable exhibitors.

Respectfully submitted,

Clarence G. Toland, *Chairman.*

* * *

The following report was received from the committee of the San Diego County Medical Society. This report was written by Dr. Lyle C. Kinney.

To the President:

The California Pacific International Exposition at San Diego now presents as a major educational feature the Hall of Medical Science, sponsored by the California Medical Association and the San Diego County Medical Society.

The Exposition Company has provided the most beautiful and best-located building in the Park, and they have given the sponsoring committees unlimited and wholehearted coöperation throughout the assemblying and installation of the exhibits. The entire building is under the control of the committee of the California Medical Association, and all exhibits have been selected and approved by that committee.

In spite of the seemingly impossible task of assembling a medical exhibit in two months, the generous support of national and state societies, and of many California institutions, has produced a Hall of Medical Sciences that is interesting, instructive, and a credit to the medical profession.

The building was opened March 7, with about 60 per cent of the material in place, but so arranged as to give the impression that it was nearly complete. The formal opening on March 28 should show a well-balanced display of the message of modern medicine.

The exhibits in place on the opening day were furnished by the following organizations:

The American Medical Association.
California Medical Association — Institute of Public Health and Ivy Exhibit.
American Society for Control of Cancer.
California Tuberculosis Association.
Department of Public Health of California.
Board of Medical Examiners of California.
Pacific Coast Society of Obstetrics and Gynecology.
Los Angeles Maternity Service.
Los Angeles County Health Department.
E. H. Angler Society of Orthodontists.
Chicago Roentgen Society and Pacific Roentgen Club.
University of California Hospital.
General Electric X-ray Corporation.
California Dairy Council.
Automobile Club of Southern California.

An exhibit of human pathology, assembled by Dr. Alvin G. Foord, with the following organizations contributing:

School of Medical Evangelists.
Los Angeles County Hospital.
Pasadena Hospital.
Stanford University Medical School.
University of Southern California Medical School.

An exhibit on the care of the crippled child, furnished by the Los Angeles Orthopedic Foundation, Los Angeles Children's Hospital, Crippled Children's Society of San Diego, and the American Physiotherapy Association.

The following organizations have made valuable contributions, and have loaned special features that have been included in the above exhibits:

Los Angeles County Hospital.
San Diego County General Hospital.
San Diego Museum of Natural History.
San Diego Zoölogical Society.
Department of Obstetrics and Gynecology, University of Southern California.
Reif Research Laboratories.
Cutter Laboratories.
Westinghouse X-ray Corporation.
Eastman Kodak Company.
Parke, Davis & Company.

Exhibits are being prepared which have not yet been installed, as follows:

University of Southern California, College of Dental Surgery.
San Diego County Health Department.
Stanford University Department of Medicine.
United States Naval Hospital.
Plastic Surgery, loaned by Dr. H. L. Updegraff.
Reconstruction Surgery, loaned by Dr. Arthur Smith.
United States Navy.
Max Woecher and Son Company.

The San Diego County Medical Society has furnished a modern office reception room, where visiting physicians and their families may register, receive mail and telephone calls, and which may be their headquarters while in San Diego.

The Hall of Medical Science contains the finest auditorium in the Exposition, which will be devoted to scientific lectures and motion pictures. The committee will welcome information as to speakers, who will be available for this program at any time throughout the Exposition.

At the onset of this project, the committee selected the retiring president of the San Diego County Medical Society, Dr. William H. Geistweit, Jr., as director of medical exhibits. The enormous amount of work and details in the preparation of the exhibit has fallen upon him and his office, and the success of the undertaking is due to his untiring efforts and his ability and courage in conquering insurmountable obstacles. The committee is deeply indebted to Mr. Phillip Gildred, managing director of the Exposition, and to Mr. Phillip Van Dusen, in charge of construction and installation, for their constant help and coöperation, without which the exhibit would have been impossible.

The San Diego committee desires to congratulate the committee of the California Medical Association on the many valuable exhibits they have obtained, and to express sincere gratitude and appreciation for their unfailing support and encouragement.

Committee of the San Diego County Medical Society: B. F. Eager, president; W. C. Crabtree, secretary; J. F. Churchill, W. W. Crawford, T. O. Burger, M. C. Harding, Alex Lesem, and L. C. Kinney.

COMMITTEE ON SCIENTIFIC EXHIBITS

Executive Group

John C. Ruddock, Chairman

W. A. Morrison — Gertrude Moors
Rawson J. Pickard — Harold A. Fletcher

To the President and House of Delegates:

The listing in the scientific program, as published, of the exhibits to be displayed at the annual meeting of the California Medical Association at Coronado, summarizes the work of this committee. Your committee wishes to call attention to the fact that more members of the Association are applying for space to exhibit scientific material than in former years.

The committee has passed upon the applications submitted to them as regards the desirability of the various exhibits at our annual meeting.

Your committee feels that wide publicity should be given the members of our Association through the JOURNAL, in order that more exhibits be given at our annual meetings, thus relieving the sections from large numbers of papers, and making it easier to find satisfactory auditoriums to accommodate our meeting.

It is recommended that the Council urge the members of the Association to apply for exhibits of subjects and material in lieu of papers, and also that the Council of the California Medical Association urge the various section officers to conform with this principle.

Your committee tenders its appreciation to those members who are contributing to the success and value of this program by exhibiting scientific material at this meeting.

Respectfully submitted,

John C. Ruddock, *Chairman.*

COMMITTEE ON SCIENTIFIC SECTIONS

Executive Group

Morton R. Gibbons, Chairman

Lowell S. Goin — Lemuel P. Adams
John C. Ruddock — F. F. Gundrum

To the President and the House of Delegates:

This committee was directed to devise a plan, or plans, for submission to the Council and the House of Delegates by which the multiplicity of scientific sections and meetings at the annual convention would be limited, and at the same time more members be enabled to hear more papers, and the general practitioner have the opportunity to follow a more diversified program than at present.

Plans are under consideration. Report will be presented at Coronado.

Respectfully submitted,

Morton R. Gibbons, *Chairman.*

COMMITTEE OF SIX ON HEALTH INSURANCE

Executive Group

T. Henshaw Kelly, Chairman

Walter B. Coffey — J. B. Harris
Joseph Catton — Fred DeLappe

E. T. Remmen

To the President and House of Delegates:

This committee, created by the special session of the House of Delegates at Los Angeles on March 3, 1935, reported to the 1935 annual session of the House at Yosemite, 1935 session.

Following this annual session, and pursuant to the instructions of the House of Delegates contained in Resolution No. 9, the committee returned to its duties and, finding that the 1935 legislature was in no mood to pass a health insurance act satisfactory to the physicians of California, or perhaps any act at all, it agreed, after consultation with the sponsors of the proposed act, to the legislative death of the bill in both houses of the legislature.

Each house appointed an interim committee to continue the study of the costs of sickness in California, with instruction to report to the 1937 legislature.

The committee, its advisory committee, the general counsel of the Association, Hartley F. Peart, his associate, Howard H. Hassard, and John B. Canning, professor of economics at Stanford University, the advisor to the committee, spent many days and nights in the preparation of the bill and in consultation with the Senate Interim Committee on the original bill and proposed amendments thereto. The members of the Committee of Six, Professor Canning, and Messrs. Peart and Hassard, spent practically their entire time on the work of the committee from March 16 to April 12, at which time the bill was included in the report of the Senate Interim Committee.

It became necessary, at the urgent request of the Senate Interim Committee, for members of the Committee and Professor Canning to spend much time at Sacramento, and in order that the instructions of the House of Delegates be properly carried out and that the California Medical Association not appear before the legislature as a house divided against itself, the committee felt it imperative that the members of the California Medical Association should be kept informed of the character of the bill and the changes occurring therein as it was handled in the legislature.

To that end, letters and a copy of the bill as introduced were printed and sent to each member of the California Medical Association.

Professor Canning's services were indispensable to the committee, and his knowledge of the tax laws and his early acquisition of the importance of the physician's special knowledge and point of view were crucial in obtaining any medical representation in the proposed plans. From March 16, the first meeting of the Committee, to May 18, 1935, the day of the appointment of the Interim Committees, Professor Canning spent over sixty full days and many nights at the service of the committee.

With the adjournment of the 1935 legislature the duties of the committee ceased, and it presents this report as a supplement to its report to the 1935 House of Delegates at Yosemite. A summary of the expenditures of the committee is appended hereto.

In closing this report, the committee, as a result of the experience gained in the 1935 legislature, would like to state that in its opinion the time for compulsory health insurance of a satisfactory type has not yet arrived in California.

When, and if, the time comes that health insurance is imminent, the Association should be a collaborator, to the end that the system enacted into law will provide the maximum of benefit to those included in its provisions and the greatest promise of the development of fine medical service by the profession in California.

* * *

COMMITTEE OF SIX

Statement of expenses as of December 31, 1935

May, 1935:	
James H. Barry Company, circular letters	$ 569.62
Traveling expenses—Committee members	159.59
Stanford University Press—S. B. 454	507.37
Legal Services	2,998.72
Professor J. B. Canning	1,550.00
Telephone	5.01
Expenses of Committee members at Sacramento, March 16, May 16, 1935	495.88
	$6,286.19

Respectfully submitted,

T. Henshaw Kelly, *Chairman.*

COMMITTEE ON TAX SUPPORTED HOSPITALS AND MEDICAL CARE

Executive Group

Axcel E. Anderson, Chairman

Louis A. Packard Earl E. Moody

To the President and the House of Delegates:

Pursuant to a resolution adopted by the House of Delegates at the Yosemite meeting in 1935, a committee was appointed to investigate tax-supported medical service and hospitalization, and to make recommendations concerning them. County hospital problems, as affecting the membership of the California Medical Association were considered the main object of this investigation, so the committee has concerned itself entirely with such hospitals.

Prior to the end of the World War, our county hospital problems were unimportant. Since that time they have had a mushroom growth, keeping pace with the insidious and rapid increase of county hospital service.

From 50 to 90 per cent of the medical and hospital care is now being rendered in many counties at taxpayers' expense. The resultant loss of practice has impoverished many of our members and deprived others of their rights and opportunities to earn a decent American living.

A planned effort to make county hospital service as attractive as possible is apparent. To remove the stigma of hospitalization at a charity hospital, the name of the institution would be changed, so instead of "County Hospital" we now have the "General Hospital." * . . .

A very important factor in the increase of county hospital problems is the more general recognition of the value of the political patronage connected with the control of such institutions. The milk of human kindness has suddenly replaced the blue blood of the politicians, and the supervisors in charge of the county hospitals have become the great benefactors of the sick by making it easy to get the hospital service. This is being done in some instances quite regardless of the laws governing admissions, and any patient may enter some hospitals even if he is quite able to pay for private hospital care.

The recent economic depression and the paternal attitude of the Government, which have fostered dependency on governmental agencies for the care of personal needs, have vastly increased the demands for free service and county hospital activities.

In some localities the abuse of county hospital service is traceable to a few members of our profession. Selfish motives have caused these few to jeopardize or sacrifice the interests and welfare of the other physicians of the community. Your committee has several times received the report that the county hospital doctors are using the county institutions to hospitalize their private patients at public expense while excluding the other physicians of the place from this privilege. This problem needs attention. . . .

Another problem is the activity, political and otherwise, and the declared purpose of some large organizations, such as the Farm Bureau, to open the county hospitals to everyone, and secure medical-service conditions similar to those in Kern County.

When your committee met and surveyed its task with its many complicated problems, it became quite evident that, considering the time and means allotted, the investigation would necessarily be incomplete.

It was decided that much of the required information could be secured from correspondence and questionnaires. After such information was secured, personal visits were made and conferences held with representatives of ten counties. We felt that the information gained from the questionnaires was very valuable, and, in most cases, complete. Thirty-one counties assisted the committee. Many of these questionnaires were answered so completely that no further study was necessary in those counties from which they came.

Tabulations of the information gathered are presented for the thirty-one counties listed. Fortunately, county hospital difficulties are not present everywhere throughout the State. A map of California in which the counties are blocked off to show trouble with the county hospitals in one way or another, reveals the interesting fact that the entire San Joaquin Valley, with the exception of Fresno County, may be considered in difficulties. San Francisco

* The periods indicate that this portion of the report will be made verbally to the House of Delegates, at Coronado.

County is practically surrounded by trouble areas, with some extension to the Coast and the Sacramento Valley. The territory covered by these counties is large, but the population relatively small. The counties considered to be in trouble have a combined population of approximately one million as against five million in other parts of the State considered free from serious difficulties. No definite statement, of course, can be made as to how long this ratio will continue. A study of the tabulation presented with this report shows:

1. . . . *There is no uniformity of methods of operating the thirty-one hospitals listed.*

Probably some time in the dim past a lay board set up rules for the management of county hospitals and the supervisors responsible adapted these rules as they understood or desired them. In a few instances there exists an advisory board to which the supervisors may look for directions for operating the county hospital. The tabulation reveals the fact that these hospitals are the best-managed county hospitals in the State. Their admission rates are low, and political influence is largely eliminated. However, it should be mentioned that the advisory board, unless operating under a charter which specifies the functions of such a board, cannot dictate to the supervisors, and the supervisors are not legally empowered to delegate authority to such board.

2. . . . *In a majority of counties, no harmony or co-operation exists between the medical profession and supervisors.* Medical men are not asked for advice, and the supervisors do not accept it when offered.

In several counties there has been an open break between the supervisors and the profession. In only eleven counties, including four with advisory boards, have the supervisors asked for advice on medical and hospital matters. Generally in the counties in which least harmony is found, the county hospital situation is at its worst.

3. . . . *There is too much hospitalization with consequent waste of taxpayers' money.* The normal yearly admission to all hospitals in the United States is 66.6 per thousand population. Three county hospitals in California admit more than this figure to their own institution. In one county, if private hospitals are added, it gives the county almost double the national rate. Unnecessary and prolonged hospitalization occur, especially in hospitals having a part-time paid staff. The staff may be too busy with private practice to give prompt attention to the county hospital patient. Many counties are operating in an efficient manner, but it is difficult to reconcile an admission rate of less than 10 per thousand in one county, and 80 per thousand in another.

4. . . . *There is no standardization or uniformity in methods of what is considered a basis for admission.* In only a few counties are trained medical social service workers employed. In only four counties is a specific system used. Blanks to be filled out by applicants vary from a complicated form to none at all. In some instances only a card from the supervisor is necessary. In the out-patient clinics the same variations are shown, but, in addition, some of these clinics accept all applicants, and no questions asked. Abuse of emergency admissions is frequently reported. Maternity cases are often found admitted as emergencies, with the emergency admission planned months previously by the patient.

The sincerity of efforts to confine admissions to indigents is fairly evenly divided pro and contra.

5. . . . *The administrative director of nearly half of our county hospitals is a part-time physician,* who devotes as much, or more, time to his private practice as to the hospital. From information gained by personal conferences, your committee believes that private patients are hospitalized by some of these men at public expense, and fees are collected for services. These fees may be charged for as office examinations or home care after leaving the hospital, as a substitute for a surgical fee. This practice permits the county hospital doctor to offer free hospital service, and creates an unbearable situation for the doctor who is excluded from practicing at the county hospital.

Some of these medical directors are paid a salary sufficient to secure excellent full-time service, and their competition in private practice seems unfair, unjust, and unnecessary.

6. . . . *Only twelve county hospitals are recognized for interne training.* The lack of standardization of management, service, records, etc., and possibly some of the undesirable conditions already mentioned, keep these hospitals from recognition for interneships. Some of these hospitals must hire residents at high salaries to carry on their work with, of course, added cost to the taxpayer.

7. . . . *Part-pay plans have been instituted in a few counties.* This service, proposed by county medical societies to provide care for patients not admissible to the county hospital, but deserving care at less than usual fees, deserves more general adoption. In many counties such plans have been proposed, but have been ignored or rejected by the supervisors.

This part-pay method should not be confused with the attempt of some county hospitals to collect from certain patients believed able to pay something for their care. We use the word "attempt" advisedly, because the collections are very inconsiderable when checked against the cost of operation. Collections are seldom enforced by the county legal department.

8. . . . *Private hospitals in the counties tabulated, with* few exceptions, could amply care for all but strictly indigent patients.

9. . . . *Out-patient clinics conducted in connection with county hospitals* are an unfair competitor of the physician's office. Many have no social service investigation and, frequently, where such service is carried out it is quite inadequate. The maintenance of these clinics means a great increase in the cost of the county hospital service. One county with one hundred out-patients per day reports an operating cost of $16,000 a year.

COMMENT

The reduced economic conditions of the people of California greatly increased the proper use of the county hospital service during the recent years of depression. We believe that many boards of supervisors made honest attempts to meet the decreased ability of self-respecting people to provide needed care. A larger part of the increase was the care of families on relief, or families whose circumstances would undoubtedly classify them as indigents according to the recent Appellate Court decision. The needy throughout the State as a whole were cared for by the counties in a commendable manner.

Continuing this care after these people have improved their circumstances is unfair to the taxpayers, the medical profession, and the patients themselves. Good citizenship is not built upon doles and gratuities, and the chiseler attitude is easily developed. Neither can we condone the attitude of a board of supervisors ordering the admission of patients known to have substantial resources, or patients who are county employees with good salaries or, in some instances, the supervisors themselves and members of their families.

The baneful effect of political influence in county hospital affairs is best illustrated by the situation arising in one county in which the supervisors insisted that the medical profession care for this class of patients without remuneration. When the staff of unpaid doctors of the hospital refused to comply, it provided the opportunity for a few physicians to take over the hospital service and begin the practice of using the county hospital for their own gain, and with the protection of the supervisors to maintain their position over the protest of the profession.

The care of the poor has long been the burden of the physician. The physician has not been expected to ask for remuneration. As early as 1766, the oldest medical society in America (New Jersey) put into its constitution, "As we separated ourselves to an office of benevolence and charity, we will always most readily and cheerfully, when applied to, assist gratis, by all means in our power, the distressed poor and indigent in our respective neighborhoods, who may have no legal maintenance and support from their county; but where such legal provision takes place, there we shall expect a reasonable reward from the particular town or county in which such poor may belong." It is our opinion that this sound statement of the case might well be applied to the present situation, provided all members of the medical profession would act uniformly. In this connection, we are reminded that we are working under a code of ethics. An opinion was expressed recently by one member of a county society, when questioned in regard to his county hospital activities, that the county society was for the purpose of hearing scientific papers and it was none of their business how he conducted his private practice. May we again refer to the

state of New Jersey, where its president, Dr. William Elmer, stated in 1860: "We are ethical because we are on duty and need the drill and decorum of a well-equipped corps, and need that stragglers and deserters be kept outside the lines in order that we may do the most good and effective service for the public weal."

It is very apparent from information gained in this investigation that our Legislative Committee is again to be taxed to its utmost in the next session of the legislature. It is too early to predict just what the nature of the next attack will be. It will depend somewhat on the final determination of the force and effect of the recent ruling of the Appellate Court. At the present time it appears most probable that the *open county hospital proponents will attempt an initiative*, aided by the Farm Bureau, Grange, and certain Union Labor elements. How much effect the argument to the taxpayer on costs will have is problematic.

A phase of the county hospital situation which is worthy of serious thought is the great amount of obstetrical work being done in these hospitals. It is apparent that in many counties from 50 to 66 2/3 per cent of all babies are being born in county hospitals. Visualization of the future gives us, therefore, a people the majority of whom are county-hospital born. It means an electorate within a reasonable term of years controlled by those born in the county hospital. It is not hard to see what the future may bring if this condition continues to prevail.

SUMMARY

The outstanding facts of the county hospital situation, as secured by your committee from personal observation, correspondence, questionnaires, and other information gained from members of this Association in different parts of the State, have been given months of serious consideration by your committee, and may be briefly stated as follows:

1. In thirty-one counties studied, there are thirty-one different methods of running a county hospital.
2. Even those counties with advisory boards show considerable variations although the results are all good.
3. It is very evident that in many counties there is too much hospitalization.
4. Waste of the taxpayers' money is wanton in some instances, and very evident in others.
5. A big portion of the State is rapidly becoming county-hospital minded.
6. The question of who is eligible for county hospitalization has an alarming variation throughout the State.
7. Very few counties make a definite study, from a medical standpoint, as to a patient's eligibility.
8. The admission of so-called liability and compensation cases is increasing.
9. Politics is rampant in many counties, and supervisors will take advice only from medical men who will agree with them.
10. A few medical men have sold out their profession for their own gain.
11. There is no doubt that the political use of the county hospitals is the most pernicious of all factors encountered.
12. There has been either a lack of desire or will on the part of some county society members to back up the society in efforts to resist abuses, or a lack of energy in this direction on the part of the component society as a whole, in several counties.
13. The rapid increase of support of the supervisors by lay organizations has been secured in a large part by half-truths, misstatements, and political ruses.
14. The amount of taxes paid by the private hospitals to the county exceeds the sum total of money collected by county hospitals for so-called pay-patients in nearly all counties.
15. Adequacy of service is a secondary consideration with a majority of prospective patients seeking county hospital service.

Whether the taxpayer will or can stem the tide is a question. Taxes to support county hospitals have increased as high as 1200 per cent in the space of a very few years.

It is the opinion of this committee that if the full control of county hospitals were removed from the supervisors, county hospital agitation would cease in a very short time.

Mention has been made of personal conferences held with representatives of ten counties. With three exceptions, these counties were seriously affected by their county hospital troubles.

Tabulations of questions answered by thirty California Medical Association members from these counties follow:

Ten Counties	No	Yes
1. Does any of the fault for the present situation lie with members of the county medical society?	3	7
2. Does fault lie with supervisors and politics?	2	8
3. Reasons why supervisors and medical profession do not agree	4 none	6 political
4. Are elements outside of supervisors responsible for supervisors' position (eight farm bureau and allied situation)?	2 none	8
Worst feature of entire situation?	Political control	

RECOMMENDATIONS

1. Since our county hospital problems are obviously the result of factors from within the medical profession itself, together with outside influences, it is recommended by your committee that each county immediately take steps to eliminate these factors of trouble within its own ranks. Failure to face this matter in a fearless manner may lead to disastrous results for our entire membership.

2. Since our present laws vest the supreme control over county hospitals in boards of supervisors composed of lay individuals, ignorant usually of hospital needs and management and who often use this control to gain political power, and considering further that making a political football out of the county hospitals has in several counties resulted in inadequate care of the sick entitled to proper care at the county hospital, it is unanimously agreed that to remedy this situation it is necessary to eliminate politics and the present method of control by supervisors.

The election of supervisors friendly to the medical profession and willing to accept advice is hopeless in many counties and, if possible, would be a recurring battle every two years. Your committee, therefore, unreservedly recommends that an attempt be made to secure *centralized control* of all hospitals in the State. We recommend that a *state control* board be given the authority to regulate hospitals, and that each county operate under an *advisory board* appointed by and subject to the State board. This can be accomplished by amending the present public health law, vesting hospital control in the existing State Board of Health, thereby avoiding the creation of a new department or board.

It is further recommended that (*a*) the details of such a plan be worked out by the Council of the California Medical Association and its Legislative Committee; (*b*) it be left to the discretion of the House of Delegates whether the attempt be made through the legislature or by an initiative act; (*c*) that this matter should be given preference and first consideration by the Council and House of Delegates over other legislative and initiative problems.

3. It is recommended that each component society of the California Medical Association be thoroughly educated as to the county hospital situation *throughout the State*, and that they further be informed on the matter of the present legal status and that the assistance and support of the California Medical Association, from a legal standpoint, be assured such component societies if necessary.

4. It is further recommended that each component society attempt, through direct or indirect conferences, to secure the coöperation of the boards of supervisors of their respective counties, and that, where it is possible, friendly adherence to the Appellate Court decision be secured.

5. It is recommended that detailed study of this problem be continued, either (*a*) through a continuation of a committee provided with sufficient funds; (*b*) by a committee assisted by a part-time director; or (*c*) a committee acting with a full-time director.

Since it seems to be very essential that a definite county hospital policy be developed, and in order that all component societies be united, a tremendous amount of work will be necessary. Only thirty-one counties participated in this investigation. Many not reporting are known to be in difficulties. This is further evidenced by the fact that many unreported counties are listed as *amici curiae* of the Kern County Supervisors in the appeal to the Supreme Court. It is most essential to the welfare of the

California Medical Association that there be no division of opinion on the county hospital problem in the medical profession of California. A well-defined program with unanimous support is absolutely essential to prevent a more chaotic situation than now exists.

6. Voluntary hospital insurance as provided by Senate Bill 246, will not, in the opinion of your committee, satisfy the demands for free service, but it is our belief that it will have some favorable effect. We, therefore, recommend the promotion of hospital insurance service as freely and soon as possible.

7. It is recommended by the committee that the House of Delegates shall express its desires in reference to recommendations 2 and 5. In the consideration of both, the committee wishes to especially bring to the attention of the House of Delegates the vital necessity of adding a great deal of information to that already gathered, and whether or not an initiative is attempted such information as may be gathered will be a determining factor in the ultimate outcome if properly prepared and used. In considering the initiative the committee believes a plan can be worked out to secure the required signatures for a fraction of the estimated cost ($35,000) of the basic science petition. In the consideration of both of these recommendations it is a matter of fact that the recent Supreme Court decision was a decided spur to our opponents, who have been securing signatures to the following petition for several weeks. It proposes a constitutional amendment as follows:

"The governing body of any city, county, or city and county, is hereby authorized and empowered to establish and maintain therein a hospital, or hospitals, to provide rules and regulations for the proper management and the appointment of the necessary officers and employees thereof, and said governing body shall make rules and regulations governing the admission to, and the care, as patients in said hospitals, of any citizen of the United States who is a resident of said city, county, or city and county, whether such persons be indigents or non-indigents, and may in said rules and regulations establish the rates or fees to be charged each non-indigent patient for services rendered and supplies furnished to such non-indigent patient in such hospitals."

The committee would like to quote Mr. Alfred Siemon, the attorney in the Kern County case, who has a valuable fund of information on the county hospital situation from the legal and political side. Mr. Siemon says:

"Since this question of public hospitalization is going to have to be fought out before the people, now, perhaps, is as good a time as any. During the next two or three years there is bound to be a strong reaction against further extension of governmental services, and it is going to be very difficult to add anything more to the public burden. The proposed initiative constitutional amendment, petitions for which are now being circulated, would authorize large-scale commercial hospitalization by counties. It would afford the pretext for the supervisors to build extensive new county hospitals, to fill them full of modern equipment, and to add hundreds of people to the public payroll. Supervisors would be wholly unable to resist the temptation which would thus be dangled before their eyes to embark upon enormous spending campaigns for the building and maintenance of new public hospitals. That will clearly appear the way the matter is now being presented by the Initiative; and people are very readily seeing that the governmental structure will not stand the strain. This may be another case where the greed of public officers will be the most convenient means of defeating their object." . . .

"Your state society and each county society should make a study of county hospitalization. The decision in *Goodall* vs. *Brite* shows very clearly that the costs of county hospitalization should be figured on the same basis as the costs in private hospitalization are figured." . . .

"It is also clear, from the decision, that the cost of operation should be computed on the basis of people actually hospitalized, as distinguished from the care of aged people; and that it is not a proper method to attempt to determine the cost of county hospitalization by including the inmates of old folks' homes for the purpose of bringing down the average. It is almost certain that it will be found that county hospitals cost more than private hospitals when figured on the same basis." . . .

"In one of my radio talks I made such a computation in regard to the Kern General Hospital and showed that the cost per patient, properly figured, would run around $7 per day. Data of this kind, gathered from all over the state, would prove to be excellent campaign material in the coming contest of the Initiative." . . .

"The decision in *Goodall* vs. *Brite* is now final, and the literature will be filed soon. Whether the supervisors will attempt to ignore the decision is uncertain; but I think they will give us trouble. There is enough uncertainty arising out of the decision of the Appellate Court to make it difficult to secure anything like a clear dividing line between those who should and those who should not be admitted. It is probable that we shall have to resort to contempt proceedings against the Board." . . .

In regard to the proposed constitutional amendment, Mr. Siemon says:

"This means commercial hospitalization by the counties and the total extinction of all private hospitals and of all private treatment of the sick. Make no mistake about that. You boys will have to fight as you never fought before if the private practice of medicine is to continue in this State; but with proper organization and effort you can doubtless settle the thing favorably for many years to come."

Every member of the California Medical Association should read and study this petition, especially that portion which says:

"And may in said rules and regulations establish the rates or fees to be charged each non-indigent patient for services rendered." Note particularly this does not specify hospital services.

In this proposed constitutional amendment we have the most vicious form of State medicine ever proposed, which, if passed, means the practical extermination of every private hospital and every private practitioner of medicine in every county in which it is put in effect.

In submitting this report to the House of Delegates the committee wishes to thank the officers and members of the component societies who have so kindly and thoroughly aided in the work.

Respectfully submitted,
A. E. Anderson, *Chairman.*

VI
ADDENDA
Resolutions

Introduced by M. R. Gibbons, Sr., Councilor.

Subject: *Board to Review Medical Testimony.*

WHEREAS, Court and Compensation Board hearings reveal an increasing amount of testimony given by licensed physicians and surgeons that is not based upon scientific facts or in accord with accepted opinion and practice; and

WHEREAS, Such testimony, often warped intentionally in an effort to support an attorney's declaration, brings discredit to the entire medical profession, and contributes to the miscarriage of justice and at the same time encourages initiating suits that are without merit; therefore, be it

Resolved, That the House of Delegates authorizes the appointment of a state committee on review of medical testimony, composed of five members, and that such committee shall act in a consultant, advisory, and assistant capacity to similar county committees; and be it

Resolved, That the Council shall instruct each county society to appoint from its members a board to review medical testimony charged with the following:

1. To review all medical testimony given before courts and compensation boards in the county.

2. To call in any member whose testimony before a board or court is not in accord with scientific facts, accepted opinions and practice, for the purpose of discussion and preventing repetitions of such discredited opinions and testimony.

3. To, when facts and acts warrant, report such expert witnesses to the proper committee of the society with recommendation that disciplinary procedures be inaugurated against the member who has given questionable testimony and opinions.

CALIFORNIA MEDICAL ASSOCIATION

This department contains official notices, reports of county society proceedings and other information having to do with the State Association and its component county societies. The copy for the department is submitted by the State Association Secretary, to whom communications for this department should be sent. Rosters of State Association officers and committees and of component county societies and affiliated organizations, are printed in the front advertising section (Adv. pages 2, 4 and 6).

CALIFORNIA MEDICAL ASSOCIATION

ROBERT A. PEERS.....President
EDWARD M. PALLETTE.....President-Elect
FREDERICK C. WARNSHUIS.....
Secretary-Treasurer and Associate Editor for California

STATE AND COUNTY SOCIETY ACTIVITIES

"BROTHER, CAN'T YOU SPARE A DIME?"

In the body of this comment the "dime" will be raised to the "dollar" denomination. As you read on, may they become in your thoughts several hundreds of dollars.

In the February and March issues an editorial and comments, under "I Give and Bequeath," were published, earnestly suggesting and inviting members and lay friends to determine to arrange to give now or bequeath in their wills a definite sum of money toward an Association Endowment Fund. The principal gift to remain intact in perpetuity or for a given number of years, as the donor may elect; the interest income of the endowment to be used to promote some specific project or cause or to defray the expenses of the expanding activities of the Association. Such endowment gifts may be designated as memorials to individuals or relatives. It is felt that some members have paused to consider this solicitation and that others may need further incentive ere they respond. Hence further comment.

Our Association fails unwillingly to participate in this or that movement, to initiate new movements, or to promote or enlarge this or that activity, solely because funds are not available to defray the expense that is entailed. The Association is hampered, restrained and rendered inactive in representing public and professional interests in many avenues where, were we financially able, it would be possible to achieve great good for human health welfare. It is regrettable that these opportunities cannot be embraced and Association support contributed. Our present sources of income cannot be expanded, hence the appeal is being made to those who are able, to provide additional funds by endowment gifts now or in their wills.

Brother, can't you spare a "thousand or even more dollars" for such an endowment? Posterity will be beholden to you for all time if you can and will. Will you?

* * *

PRESIDENT'S DINNER

As indicated in the program, the dinner in honor of our president will be given at 7:15 p. m. on Tuesday evening, May 26, in the dining room of the Hotel Del Coronado. This function is a feature of the entertainment of an annual session. It has always been a most enjoyable social affair.

Advance reservations for rooms indicate a large attendance. Hotel facilities will be severely taxed. The management is bending effort to serve the greatest number its facilities permit, and yet we fear that it will be impossible to accommodate all. So first come will be first served.

A ticket limitation has been imposed. A ticket is required for every individual. *No admittance without a ticket. Obtain your ticket when you register.*

* * *

YOUR BUSINESS PATRONS

Costs of publication would constitute a large draft on Association funds were it not for advertising income. These advertisers are your individual business patrons. They, by their patronage, make it possible to issue your JOURNAL with its present contents, form, and style. That fact is all too often overlooked by the member. There are those who rarely, if ever, give thought to those who pay for space on our advertising pages. This is not the spirit of reciprocity.

Our advertisers are all firms of highest integrity, and merit not only your patronage, but also your confidence. Their advertisements in each issue is a personal card of introduction to you, and when a representative calls on you he should be accorded preference over those who may represent non-advertisers. Other things being equal, confer your patronage to our advertisers, and by all means read and answer their advertisements.

* * *

PRINCIPLES OF ETHICS

Last month Chapters I and II were printed. Chapter III merits mature reflection.

Chapter III

The Duties of Physicians to Each Other and to the Profession at Large

ARTICLE I. DUTIES TO THE PROFESSION

UPHOLD HONOR OF PROFESSION

Section 1. The obligation assumed on entering the profession requires the physician to comport himself as a gentleman and demands that he use every honorable means to uphold the dignity and honor of his vocation, to exalt its standards and to extend its sphere of usefulness. A physician should not base his practice on an exclusive dogma or sectarian system, for "sects are implacable despots; to accept their thraldom is to take away all liberty from one's action and thought." (Nicon, father of Galen.)

MEDICAL SOCIETIES

Sec. 2. In order that the dignity and honor of the medical profession may be upheld, its standards exalted, its sphere of usefulness extended, and the advancement of medical science promoted, a physician should associate himself with medical societies and contribute his time, energy and means in order that these societies may represent the ideals of the profession.

DEPORTMENT

Sec. 3. A physican should be "an upright man, instructed in the art of healing." Consequently, he must keep himself pure in character and conform to a high standard of morals, and must be diligent and conscientious in his studies. "He should also be modest, sober, patient, prompt to do his whole duty without anxiety; pious without going so far as superstition, conducting himself with propriety in his profession and in all the actions of his life." (Hippocrates.)

ADVERTISING

Sec. 4. Solicitation of patients by physicians as individuals, or collectively in groups by whatsoever name these be called, or by institutions or organizations, whether by circulars or advertisements, or by personal communications, is unprofessional. This does not prohibit ethical institutions from a legitimate advertisement of location, physical surroundings and special class —if any—of patients accommodated. It is equally unprofessional to procure patients by indirection through solicitors or agents of any kind, or by indirect advertisement, or by furnishing or inspiring newspaper or magazine comments concerning cases in which the physician has been or is concerned. All other like self-laudations defy the traditions and lower the tone of any profession and so are intolerable. The most worthy and effective advertisement possible, even for a young physician, and especially with his brother physicians, is the establishment of a well merited reputation for professional ability and fidelity. This cannot be forced, but must be the outcome of character and conduct. The publication or circulation of ordinary simple business cards, being a matter of personal taste or local custom, and sometimes of convenience, is not *per se* improper. As implied, it is unprofessional to disregard local customs and offend recognized ideals in publishing or circulating such cards.

It is unprofessional to promise radical cures; to boast of cures and secret methods of treatment or remedies; to exhibit certificates of skill or of success in the treatment of diseases; or to employ any methods to gain the attention of the public for the purpose of obtaining patients.

PATENTS AND PERQUISITES

Sec. 5. It is unprofessional to receive remuneration from patents for surgical instruments or medicines; to accept rebates on prescriptions or surgical appliances, or perquisites from attendants who aid in the care of patients.

MEDICAL LAWS—SECRET REMEDIES

Sec. 6. It is unprofessional for a physician to assist unqualified persons to evade legal restrictions governing the practice of medicine; it is equally unethical to prescribe or dispense secret medicines or other secret remedial agents, or manufacture or promote their use in any way.

SAFEGUARDING THE PROFESSION

Sec. 7. Physicias should expose without fear or favor, before the proper medical or legal tribunals, corrupt or dishonest conduct of members of the profession. All questions affecting the professional reputation or standing of a member or members of the medical profession should be considered only before proper medical tribunals in executive sessions or by special or duly appointed committees on ethical relations. Every physician should aid in safeguarding the profession against the admission to its ranks of those who are unfit or unqualified because deficient either in moral character or education.

ARTICLE II. PROFESSIONAL SERVICES OF PHYSICIANS TO EACH OTHER

PHYSICIANS DEPENDENT ON EACH OTHER

Section 1. Experience teaches that it is unwise for a physician to treat members of his own family or himself. Consequently, a physician should always cheerfully and gratuitously respond with his professional services to the call of any physician practicing in his vicinity, or of the immediate family dependents of physicians.

COMPENSATION FOR EXPENSES

Sec. 2. When a physician from a distance is called on to advise another physician or one of his family dependents, and the physician to whom the service is rendered is in easy financial circumstances, a compensation that will at least meet the traveling expenses of the visiting physician should be proffered. When such a service requires an absence from the accustomed field of professional work of the visitor that might reasonably be expected to entail a pecuniary loss, such loss should, in part at least, be provided for in the compensation offered.

ONE PHYSICIAN TO TAKE CHARGE

Sec. 3. When a physician or a member of his dependent family is seriously ill, he or his family should select a physician from among his neighboring colleagues to take charge of the case. Other physicians may be associated in the care of the patient as consultants.

* * *

MEDICAL-LEGAL TESTIMONY

Expert opinion and testimony is becoming more and more discredited by juries, referees, and commissioners. This situation has become quite apparent in recent years. The Bar and courts have commented upon the problem. It involves all controversies presenting special acts and practices as factors in the dispute. We are only concerned in so far as intolerable conditions and events relate to medical-legal expert testimony.

Unity and agreement in opinions cannot be attained. Differences of opinions must and do exist—it cannot be otherwise. Honest differences are based upon honest convictions and rest upon palpable facts and factors that make them tenable—these command respect and permit one to draw his personal conclusions.

However, it is recognized that there is a serious, increasing evil rampant in a type or class of opinions that are attempted to be made plausible by bizarre, fabricated, nebulous and untruthful alleged facts. It is this latter type of expert opinion that demands exposure and censor of those who thus stultify themselves and contribute to the defeat of justice—most always for a fee.

Without mincing words, there are doctors who are willing to pose as experts and who base their opinions on premises that are not in accord with scientific fact or accepted opinion and practice for the sole reason of obtaining a fee and abetting an attorney who is seeking to win a case by hook or crook. These so-called experts merit not only exposure, but severest censor and discipline. Many of them are known and it is common knowledge that they can be bought for a price to warp and mold their testimony and opinion in the interest of the party paying their fee. They have been tolerated and at times ostracized, but continue as members in our organizational ranks. We are in part culpable for their conduct because we have not called them to task.

The time is at hand when me must free ourselves of culpability. Therefore, it is suggested that each county society appoint a board for review of medical testimony. This board is to be given authority to call in members and require explanation and justification for their testimony in any given case that is at variance with scientific fact or accepted opinion. The willful, malicious, conniving medical witness or expert should then be subjected to disciplinary measures. We are in duty bound to set our own house in order. Shall we not undertake to do so?

* * *

BIG AND LITTLE THINGS

Unless a person is in immediate contact with the office of the Association, he has no conception of the nature of the communications and reports that flow across the desk. It is a never-ending, varied stream of big and little things. Each item has some bearing upon organizational work. The little items are sometimes big, and the big items shrink to little ones—all are big to the individual writing on this or that. The four daily mail deliveries will bring in a daily average of one hundred pieces of first-class mail. Each promptly receives immediate attention. The outgoing mail may be from fifty to six thousand pieces. In March there were three days when over six thousand pieces of mail were addressed and mailed. There were days when for over a week more than three hundred pieces of mail were received. To give a bit of insight the following instances, that occur daily, are related:

Personal.—Daily, several letters relating to members' personal affairs are received. Subjects are: insurance, investments, books, journals, contract, legal problems, clinics, laws, sanitariums, automobiles, professional cards, colleges, hospitals, locations, associates, consultants. In fact, the range runs the gamut of personal interests. We are glad to receive them and seek to be helpful by prompt replies.

Public.—The lay inquiries cover every imaginable subject. These also receive prompt replies, and frequently writers are urged to confer with county society officers. Never is a single physician's name sent in response to recommend a physician or specialist. The advice is to consult the county society.

Mailing Addresses.—A mailing address list of members is never sent except to our own members or government officials.

Press Clippings.—Through a clipping service, items appearing in newspapers of the State, dealing with hospitals, health, medical care, legislation, meetings, and State agencies, are received and read. This is a valuable source of information.

Journals.—Sixty-five weekly and monthly medical journals are received and reviewed. Another valuable source of information.

Referring.—Everything bearing upon a subject that is being considered by a standing or special committee is referred to the committee chairman. Copies are often sent to state and county officers.

Examples.—One member wanted to know why he could not have his office in a restricted residence zone. A member wanted to know if it were permissible to have a cartoon of himself published in a local paper. A woman wanted to know how much ground glass it would take to kill a person. A man wanted to know if he could not sue a doctor who refused to accept him as a patient. A woman wanted to know how to tell when her husband was drunk. A bachelor wanted to sell his body when he died, and asked if we would send him the name of a doctor who would pay him $100. A housewife desired to know if she could sue a doctor who declined to answer a call and treat her. Invited to hold a $14,000 bet that one man could drink a gallon of whisky a day for seven days and eat the glass containers and survive. Traffic officer asks if there is any test he can make that will determine if a driver is drunk. Reporter wants to know if the Association will

support a certain candidate for office. Similar incidents could be cited at length.

Sustained effort is made to cause the office to be of the greatest possible service not only to our members, but also to the public.

* * *

REDUCED RAILWAY FARES

Arrangements have been made whereby members going by train to the annual session in Coronado may secure reduced railroad fares.

To secure these reduced rates *send your request and a self-addressed stamped envelope* to the State Secretary. A certificate will be mailed to you promptly. Present this certificate to your ticket agent when purchasing transportation. This certificate is necessary to secure reduced rates.

The following information comes from the railway passenger department:

ROUND-TRIP RAIL CONVENTION FARES AND ARRANGEMENTS

Ticket agents of principal rail lines in California, on presentation and surrender of identification certificate, will sell round-trip tickets to San Diego costing approximately one and one-quarter cents per mile, which is less than the first-class one-way fare. Tickets will be sold from May 20 to 28, inclusive, and return limit will be June 7. Stopovers allowed. If longer return limit is desired, consult railroad ticket agent at San Diego prior to June 7.

Following are examples of fares to San Diego, and illustrate the extent of reductions:

From	Convention Round Trip (85%)	Ten-Day Round Trip Coach	21-Day Round Trip First Class
San Francisco	$15.85	$22.58	$24.85
San Jose	14.65	20.90	23.00
Los Angeles	10.90	15.61	17.20

* * *

MALPRACTICE INSURANCE

The following is a general tabulation of the answers returned to the questionnaire recently sent to the members by the Special Committee that has been making an investigation for the purpose of devising a plan to provide adequate protection to those who are sued on alleged claims for malpractice.

TABLE 1.—*Count on Malpractice Poll: California Medical Association**

	Members
$10,000-$30,000 policies	1,812
$30,000 and over	464
Medical Protective Company	1,192
U. S. F. & G. Company	581
Etna Insurance Company	169
Lloyds	136
Increased premiums	772
Withdrawal of insurance	150
Reduction of insurance	197
Interested in group insurance	1,944
Not interested in group insurance	343
Willing to subscribe $50 stock	1,586
Not willing to subscribe stock	698

* As of April 8, 1936.

It was quite evident from many of the answers and comments returned that a considerable number of our members do not grasp or have a clear conception of the basic essentials and factors involved in this legal problem. An endeavor will be made to clarify some of the major points that have caused confusion.

There were those who did not see the need of organizing our own company. Suggestions were made that dues be increased and defense be provided by Association funds. State laws classify this protection as a form of insurance. To provide this protection it is, therefore, necessary to comply with state insurance laws and meet up to the requirements of those laws. This means that a corporation or company must be organized. This protection cannot be given as an Association member's benefit.

Some thought that $50 stock subscriptions were too high. The law requires that $100,000 must be deposited with the Insurance Commissioner before a permit to do business is issued. This amount must be deposited in one lump sum; it cannot be made in payments over a period of time. It has to be made in the form of actual money or sound approved securities. Sound business requires a reserve fund of at least $50,000. Fifty-dollar stock subscriptions from 3,500 members will provide this initial required capital.

These stock subscriptions cannot be applied on premiums. It is only fair that the members who subscribe for stock should have an interest return upon their subscriptions that will make this insurance protection available to those who do not or cannot subscribe for capital stock.

Suggestions were made to place the risk with a given company. That company is not authorized to do business in California.

The question was raised as to ability and experience to operate such a company. It is purposed to employ an experienced director in this special insurance field, and he naturally will be thoroughly experienced and competent.

The risk was mentioned. Under the proposed plan the risk will be greatly reduced. In addition, there will be 40 per cent of the premiums in reserve that other companies pay to brokers, agents, and sales expense. As soon as a safe, ample reserve is built up, premiums can be reduced.

Applicants for insurance will not be accepted until they have been approved by a local committee. Precautions to be observed by policyholders will be a condition, and this will go far in defeating claims.

Experience and practices of existing companies cannot be cited as examples. Their methods of handling claims and suits do not reflect efficiency or approved standards. Their methods have done much to create present conditions and have caused the steady increase in premium rates. Experiences in other states support this statement. Doctors have been called upon to pay and pay, because of certain practices.

Premiums will be fixed at the lowest possible rate—equal the first year to existing rates, and reduced as business and experience justifies. Coverage will be greater and more complete than is obtainable today. Defense and refusal to settle will be an important feature, and will go far in defeating verdicts for unwarranted amounts.

Members will no longer be at the mercy of commercial companies who may withdraw any moment or who may impose unsatisfactory conditions and restrict their coverage.

Our own company, under our own supervision, will restore to us control which should remain in our own hands.

* * *

AMERICAN MEDICAL ASSOCIATION REPORTS

From the reports of officers, bureaus, and councils, published in the April 4 *Journal of the American Medical Association*, the following more important items are extracted and comments appended.

Membership.—California is credited with 5,382 members. This places our State as fourth in size of membership. Our State has 3,318 Fellows and 2,278 subscribers to the national journal. These subscribers could become Fellows simply by making application, and without additional cost. The State is listed as having 10,490 physicians. This is probably true, but many hundreds are retired from practice.

It is stated that we have ten unorganized counties. California has no unorganized counties.

The American Medical Association has 101,754 members and 62,997 Fellows. *Hygeia* has 86,745 subscribers.

Building.—Two stories are being added to the headquarters building, and the brick walls replaced with stone. Alterations and new equipment cost $425,000.

Council on Pharmacy and Chemistry.

The Council has completed thirty years of service. Conditions today are decidedly better, though there are still some physicians who have not yet fully realized the detrimental influence of certain types of low grade pharmaceutical concerns. However, the scientific standing of the average pharmaceutical house is vastly improved.

During 1935 a number of new and unusual drugs were accepted by the Council for inclusion in New and Nonofficial Remedies.

Useful Drugs and the Epitome of the U. S. Pharmacopeia and National Formulary have been thoroughly revised to bring them into conformity with the new Pharmacopeia and the new National Formulary. They enjoy wide distribution.

The Council has continued the issuance of reports on the status of untried or previously unannounced drugs. It is still looked to for the standardization of new products.

The Council has under way a special investigation of catgut sutures.

The series of articles on Glandular Physiology and Therapy reports on a much needed survey of this field and has been a decided aid in evaluating the status of proprietary and nonproprietary glandular products. The articles have been published in book form. Requests for the privilege of translating the articles have been received from nine different countries.

The Council published two articles on Nonspecific Protein Therapy, which should aid in overcoming the chaotic condition of this subject.

The Council on Pharmacy and Chemistry and the Committee on Foods have formed a Coöperative Committee on Vitamins. This committee has made recommendations on vitamin problems, the decisions on which are soon to be issued. It has been emphasized to physicians as well as to manufacturers that in this field particularly a conservative attitude, based on adequate clinical evidence, is the criterion of sound therapeutic progress.

The Council on Pharmacy and Chemistry, in coöperation with the Council on Physical Therapy and the Committee on Foods, has adopted a reorganization plan which provides for a federation of the administrative work of the three groups and a correlation of overlapping problems.

Physicians are making increased use of the conclusions of the Council on Pharmacy and Chemistry, as evidenced by the increase in work.

Bureau of Medical Economics.

The activities of the Bureau of Medical Economics for the year 1935 may be summarized under the following headings:

Sickness Insurance.—Continued study of the subject; collection of reports of foreign systems, statistical data and comparison of vital statistics under these systems with nearly comparable statistics in the United States, where possible; preparation of statements setting forth the characteristics of sickness insurance and distribution of reports and specially prepared articles on sickness insurance.

Medical Service Plans.—Continued study of county medical society plans; criticism of proposed plans; collection of data and descriptive material to show well planned and balanced county medical society programs and the relative emphasis given to medical service plans; an effort to determine the measure of success attained by medical service plans in serving sick people.

Distribution of Physicians in the United States.—A study with fifty-four tables and fifteen charts to show, in part, the distribution of physicians according to population, type of practice, age and geographic location of the physicians listed in the 1931 American Medical Directory.

Medical Relations Under Workmen's Compensation.—Revision of the original report on this subject to include the changes in workmen's compensation laws and relations that were made in 1933, 1934 and the first half of 1935.

Care of the Indigent Sick.—Comment and suggestions offered on plans for the medical care of the indigent proposed by county and state medical societies.

University and College Student Health Service.—Completion of a study of University and College Student Health Service requested by the Board of Trustees in 1934 with summary and conclusions.

Group Hospitalization.—Attempt to define the term "group hospitalization"; compilation of list of group hospitalization organizations; collection of data pertaining to the experience of this new method of providing hospital facilities for the sick; criticism of proposed plans and advice concerning the attitude of the American Medical Association toward such plans.

Relation of Medical Ethics and Medical Economics.—A report nearly completed, which endeavors to show the economic implications in the Principles of Medical Ethics and a discussion of the ethical applications of the principles of medical economics.

Debate on State Medicine.—Preparation of special article for the official handbook of the National University Extension Association Debate Committee; distribution of publications of the Bureau of Medical Economics to medical societies, individual physicians, student debating teams, university extension departments and high school, college and public libraries.

General.—Travel; forty visits to thirty-three cities in eighteen states and the District of Columbia, covering a total distance of 38,610 miles. Speaking engagements and conferences; seventy-eight addresses and conferences with an attendance of 7,900, mostly physicians. Correspondence, 3,263 communications.

PROPOSED PROGRAM

1. Continued study of state-managed medical systems of foreign countries and preparation of data and reports for the use of the medical profession.
2. A study of medical service plans to determine, if possible, the measure of success they have attained in making medical services more easily available to the people of low incomes.
3. Compilation of additional data on distribution of physicians in the United States and in foreign countries.
4. Preparation of new material, to be used in revisions of the publications "Medical Relations Under Workmen's Compensation" and "Care of the Indigent Sick."
5. Completion of study now in progress on group hospitalization.
6. Revision of publication "Collecting Medical Fees."
7. A study of rural medical facilities.
8. Coöperation with Council on Medical Education and Hospitals in furnishing material and suggestions to medical schools on the instruction of medical students in medical economics.

Finances.—The American Medical Association has a reserve of $2,237,478.13 and a net worth of $3,821,102.57. Operating expenses were in excess of one and one-quarter million dollars. The larger part was for publication costs. There are some 550 persons in the employ of the Association.

Judicial Council.—We urge members to read and conform to the following extracts:

GROUP HOSPITALIZATION

Group hospitalization and individual hospital insurance plans have been rapidly spreading during the last few years as an effort on the part of hospitals to collect full payment for the hospitalization of people of low income groups who in the past have been and in the future will otherwise be unable to pay their hospital costs. This effort has been accentuated by the recent increase in the numbers of such cases combined with a great reduction in hospital income from endowment funds and public contributions. It is an effort at self-preservation and secondarily to fix responsibility on a group that during the depression has been rapidly growing among those who have little sense of personal responsibility and rather expect government or charity to care for their needs. Hospital insurance as an economic device now exists almost nationally and is spreading. The American Hospital Association and various state hospital associations are actively promulgating it.

Whether the scheme is or is not financially or economically sound is not the problem of our organization, but it is our business to see that the furnishing of medical service is not included in the sale of insured hospital accommodations. This can be done if a strong stand is taken and maintained by the organized medical profession, which must keep a watchful eye to see that medical care is not initially or later included when the usual sales efforts demand increased benefits to purchasers. It is well known that at the present time independently of the hospital insurance movement various hospitals are invading the field of practice of medicine, sometimes at and sometimes against the desire of the members of our profession involved in such instances. It would seem that in this time of extensive changes in hospital economics the point had arrived at which further marriages between hospitals and staff physicans that make the doctor of medicine the servant of the hospital should be stopped and a series of attempts at divorce among marriages that have already taken place should be instituted. Our accepted ethical principles are adequate at the present time and the coöperation of the Council on Medical Education and Hospitals would be of invaluable assistance. It is not an impossible task but will need a militant local and national ethical spirit behind it and a frowning on those individuals in the profession who on personal grounds do not object to the gradual subjugation of the medical profession in the growth of hospital domination.

ASSOCIATION WITH CULTS

There are several general ethical principles underlying cult practice in its relation to medical practice as carried out by doctors of medicine. Primarily the basis for an ethical code is the well-being of the people at large, who are dependent on the profession of medicine for their health. The profession of medicine is the custodian of the accumulated knowledge in medicine and should use it for the benefit of humanity. This knowledge, technical in nature and developed by experience, can be interpreted to the body of the people only by persons educated to understand it and trained to apply it. Of all those professing to heal the sick only the doctor of medicine has sufficient education and training to make use of the in-

formation already accumulated and keep abreast of that being developed continuously. We grant that even though this is true no one is compelled to choose only from this group in selecting his medical attendants. The individual may elect to receive his medical care from himself, his neighbor, osteopathy, chiropractic, naturopathy or Christian science, but he is not entitled while under the care of such irregulars to demand that the man educated in scientific medicine furnish opinion and advice to one so far deficient in education that he cannot so understand and apply that opinion and advice as to be able to make satisfactory use of it. Such degrading consultation would cheat the patient out of that which he might expect and the subsequent failure of results bring discredit on the science of medicine. If this is true of the occasional individual consultation, how much greater must it be in the case of repeated or continual miscegenation!

The Judicial Council is in receipt of much correspondence attempting to justify if not to advocate consultations between doctors of medicine and chiropractors, osteopaths, Christian scientists and other cultists and irregular practitioners; also appearance before their societies, teaching in their schools, and their admittance to hospital practice on a parity with the medical profession. The universal argument for all the procedures mentioned is based on the false premise "to work them gradually into regular medicine." One of our principles of ethics is as follows: "The obligation assumed on entering the profession . . . demands that the physician use every honorable means to uphold the dignity and honor of his vocation, to exalt its standards and to extend its sphere of usefulness." Such specious argument as mentioned above seems to the Council to lack substance and be unreal. It seems impossible that knowledge gained through years of scientific laboratory work and teaching can be assimilated by those of less preliminary training and use of scientific methods of investigation and practice ever to fit them to enter a profession the dignity and honor of which, the standards and sphere of influence of which, we are obligated to uphold, exalt and extend for the service the profession can render to humanity. We further are of the opinion that it is just as unpractical to suggest that the small percentage of cult practitioners will through close relationship with the membership of our profession be raised to our professional standards as it is to expect the few rot-speckled apples in the apple barrel to become whole because of the preponderance of sound ones. We believe in continuous, complete separation between the true and the specious physician. Our traditional responsibility for the dissemination of sound scientific treatment for the people and for protection against the insidious influence of the weaker among our own is ever present. If and when the time comes that government through legislation places the cultist on the same legal plane with us, we must strive to maintain the aristocracy of learning and culture. A physical and professional separation as complete as is possible should be established and maintained.

* * *

CORRESPONDENCE CONCERNING CARDS RECENTLY SENT OUT FROM CENTRAL OFFICE

Letter to Secretary from a Member

March 31, 1936.

F. C. Warnshuis, M. D.
Secretary, California Medical Association

Dear Doctor:

I beg to acknowledge your two very neat enclosures for framing in our offices. I have pondered a good deal about the one "You and Your Doctor" ever since receiving it. As I told you last time we met at the Alameda County meeting, I have been in practice long enough to know the many changes that have taken place in all the phases of our economic and professional life. I am also aware that those who are in a position to alter and meet the demands of both contingencies have labored faithfully to overcome them. But while, on the whole, they are on the right track, they allow their good judgment to be choked and the effects of their initiative smothered by tradition, which hampers the results they so ardently seek.

So to return to our "You and Your Doctor" as the pertinent thing in this letter, let me ask you frankly: First, how many doctors will frame it and put it in their offices? Second, if they do, how many patients will read them? We know what should be done, but we have not the courage to do it—at least, not in the way it should be done to bring about the results we are after. We are scared to death of the "dignity" of the medical profession. Well, when it comes to that, the doctors have ruined that more or less, step by step, by their own deeds, jealousies, unprofessional remarks and innuendos, and personal conduct, long ago. So they cannot injure it much more, so far as the public is concerned, than they already have. What we need more than anything else is decency and discipline among ourselves. I know, as I was one of the "privileged ones" for many years and have been just as guilty as many other so-called "Simon-pure" elites of the profession by *laissez faire* without offering any objections.

Competition has been so keen of late years (because of the short-sightedness of those in a position to prevent it) that we are facing a situation that demands courage, wisdom, education, and energetic treatment, lest our younger members starve or become the slaves of the state and nation. You will answer to that, "We have been doing these things for years with *some results.*" And my reply is, yes, we have been doing it just as the preachers have been preaching to congregations all over the land to people who voluntarily go to church and do not need the sermons. It is to those who do not go to hear the sermons that the truth should be rammed down their throats. Just as medical propaganda, as you suggest in your leaflet, should be taught to those who never hear or read medical talks or advice, and who never think of health until they are ill. These poor irresponsible human beings, 80 per cent of our population, never think of health in medical or economic terms.

This is, I have said for years, where we should step in with dignity and sincerity. We have worked our heads off in behalf of prevention. The laboratories and research foundations have done a great work, but little has been done to really educate the public concerning the use of the cures and the care of the ills we cannot prevent.

So, why be half-hearted in applying the remedies we know only too well as the only remedies for our dilemma. Why not tackle the enemy in his lair. The public cannot discriminate between the education of the truth, as we know it, and the claims of the quacks, unless we who are in a position to speak in our defense half as *boldly as they do.* We cannot be considered any longer in any other light than business men with sources to sell; many of our doctors have proven that. Therefore, we should approach our problems in a business way as well as with a scientific attitude.

If suggestions are made in the half-apologetic way in which they have been made, it cannot be expected to bring the results we want. Suggestions are not enough. It is facts, constant examples and lessons never to be forgotten, by the wholesale, the public needs, not as we are doing it, sporadically.

Your pamphlet brings this one more pertinent suggestion to me. Why not send a copy to each and all our patients when we mail our monthly statements, or send to all patients on our files. It would reach a larger number of people—rich and poor, educated and ignorant—in a personal way, and bring returns far beyond the cost of such an aggressive campaign. It would give a sense of relief to thousands who do not come to us because of economic embarrassment and pride. It would at once reëstablish an apparent lost confidence in the medical profession and place it on the pedestal it deserves. It would create quantity material for our offices, since we can no longer depend on quality for our financial rewards. It would create a demand for ourselves that is sorely needed and fulfil a duty we owe to the public in all the ways you have so well suggested.

Put some "punch" in our educational campaign by mail, radio, and newspaper editorials or articles in a way that would not be offensive to the most sensitive of our members. Let us not be afraid to proclaim our good intentions and ability to render humanity the altruistic services which must be realized ultimately before each and everyone's final day.

Lest you may not remember me, let me say that I am in no way an advocate of any movement which would cheapen our professional dignity or standing. I have been president of a state society, twice president of the county society, and a member of the National Legislation Committee meeting in Washington, D. C., as well as oculist and aurist for two transcontinental railroads, etc. There-

fore, I feel I may offer this suggestion without any fear of misunderstanding.

I hope you will accept this letter in the sincere spirit in which I am writing it. Those of us who have lived when medical and economic problems such as those that are facing our younger members were unknown and unthought of, could well afford to sit back and let events take their course, but I for one, who has enjoyed the blessings of a better era, hope that I can in some way suggest something to help those who have had the courage and forbearance to obtain a medical education reap the reward they so justly deserve, and at the same time help an unmindful public to avail itself of the great services the medical profession can render them.

Coming from a Minnesota man, this may sound presumptuous to some California or Stanford men, but since you are a Michigan graduate I am sure you will understand.

With kindest regards, I am

Very fraternally,

H. A. BEAUDOUX, M. D.

230 Grand Avenue, Oakland.

* * *

Reply of Secretary

Dear Doctor Beaudoux:

I am very much obliged and greatly appreciate your very interesting letter of March 31. I could probably, without mental reservation, say "Amen" to everything that you have said in your communication.

However, there are just a few points that I would like to have clarified so that you may enter into a more hopeful mood and have a little more faith in your fellow practitioners.

During the past year I have visited every county society in the State and have been in the office of one or more doctors in these counties. I recall that they displayed their membership certificates, and I was pleasantly surprised to see the number of doctors that have their certificates framed and hung on their walls, either in their reception or their consultation rooms. In ——— County I ran into a very happy incident which was related to me by two of the doctors. A general practitioner referred one of his patients to a specialist. Both agreed that an operation was necessary. The patient asked the specialist whether he was not a member of his county medical society. He replied that he was and asked why she wanted to know. She stated she did not believe he was because he did not have his certificate framed and hung on the wall as did the other doctor, and that she was not going to be operated on by a doctor who was not a member of the county medical society.

I have used this as an illustrative point in talks before county societies and also in comment that is made from month to month in CALIFORNIA AND WESTERN MEDICINE. It has resulted in the display of these certificates, and I dare say that in time we will be able to have them on display in the offices of the major part, if not all, of our members.

For the past year we have been seeking to contact the public and to acquaint them with the facts as to what scientific medicine has to offer for their physical well-being and the conservation of their health.

We are seeking to overcome the neglect that has been evidenced for so long by the profession's failure to impart to the public just what may be obtained from scientific medicine. I made the statement in a number of my talks that if medicine made no new discoveries it would take the public twenty-five years to learn what medicine has for them today. We are seeking to reduce that twenty-five-year period along several avenues. We are weekly releasing to two or three hundred newspapers of the State a three- to five-page item discussing same phase of public or private health and disease. It is pleasing to note in our clippings from the Clipping Bureau that the newspapers in the lesser populated portions of the State are printing these as well as the papers in our more populated centers. In many instances these articles constitute the only ethical source of information that these people have, and we feel that we are getting our message across.

Our second activity is Public Health Institutes, the first of which, as you probably know, was held in Oakland last November. These have been temporarily abandoned because all of our exhibits have been placed in the Hall of Medical Science at the San Diego Exposition. This building with 22,000 square feet of space is operated and sponsored by the California Medical Association and is filled with the same forty educational medical exhibits. On the opening day over nine thousand people came in and inspected the exhibits, and we trust that some of them at least learned a little. It is our program to give one or two talks in this building every week while the Fair is open until September 9. Some of these will be illustrated talks and some of them will be silent movies. I anticipate that we will reach fully a million people during the Fair season.

We have contacted Parent-Teachers' organizations, noon-day luncheon clubs, granges and farm bureaus, and we are sending speakers to them for meetings that are being sponsored by these organizations.

We have had under consideration the preparation of leaflets tersely worded but yet very clear, and had hoped to include one of these leaflets with the electric-light bills in every county. The reason why this has not been done is the expense involved because it would require the printing of approximately 55,000,000 leaflets and the Association has not the funds to do this at the present time. We are considering the preparation of leaflets or cards, or slogans, if you wish, for our members to include in their monthly statements to their patients. The only thing that is retarding us in that line is again our finances, because printing does cost money, as you undoubtedly know.

I am hopeful that the budget to be prepared and approved at Coronado will enable us to provide these leaflets and possibly some of our members will be glad to pay a small price for each series, which will help financially.

We are, in our county visits, trying to encourage and inspire our members to play the game in a fair manner. I trust you have read some of our editorial comments along this line in CALIFORNIA AND WESTERN MEDICINE. Those who have been residents of California for many years are now advising that the leaven is working, and there seems to be an apparent and palpable improvement in the attitude of doctors toward each other. Of course, we never hope to see the day when our profession will be free from its black sheep any more than the clergy or the bar becomes purified.

I am a firm believer in the doctrine of preventing the sins of the fathers from being felt by their sons. In that belief we are endeavoring to create a better and a brighter heritage for the young men in the profession who are about to enter it. You must remember, however, that this cannot be accomplished by one man. No single man ever captured a trench. Battles are only won by the coöperative efforts and unity of action of battalions and regiments and divisions. We are trying to enlist every reputable medical man in California into a division that has for its objective making better doctors, creating a kindlier spirit and feeling among doctors, and to impart to the public the sound fundamentals in regard to the problems of public and private health.

I trust I have given you an insight as to the aspirations that are being applied.

I would like very much to have your permission to publish your letter in CALIFORNIA AND WESTERN MEDICINE and a summarization of my reply to you. May I do this?

Thanking you for your communication, and with expressions of esteem and trusting that you will command us whenever you feel that we can be of service, I am

Yours very sincerely,

F. C. WARNSHUIS, M. D.,
Secretary.

A Teaser.—As a test in spelling ask your friends to write down the quoted sentence as you read it to them. The average number of errors are four. Try it and have fun.

"It is agreeable to witness the unparalleled embarrassment of an harassed connoisseur gauging the symmetry of a peeled and desiccated potato."

COUNCIL MINUTES*

Minutes of the Two Hundred and Forty-First Meeting of the Council of the California Medical Association

Held in Room 302, Sir Francis Drake Hotel, San Francisco, Friday, April 10, 1936, at 1 p. m.

1. **Call to Order.**—The meeting was called to order by Chairman T. Henshaw Kelly, with the following members present: President Robert A. Peers, Speaker W. W. Roblee, Councilors Henry J. Ullmann, Karl L. Schaupp, A. E. Anderson, A. L. Phillips, Henry S. Rogers, C. L. Emmons, Morton R. Gibbons, W. H. Kiger, Harry H. Wilson, C. E. Schoff, T. H. Kelly, C. O. Tanner, Chairman of Public Relations Committee Charles A. Dukes, Editor George H. Kress, Secretary F. C. Warnshuis, and General Counsel Hartley F. Peart.

Absent: Carl R. Howson, O. D. Hamlin; and Edward M. Pallette, on account of illness.

2. **Minutes of Executive Committee.**—It was moved by Councilor Rogers, seconded by Councilor Schaupp, that the minutes of the two hundred and twenty-fourth meeting of the Executive Committee be approved and incorporated as part of the minutes of the Council. Carried.

3. **American Medical Association Correspondence.**—A letter received from the American Medical Association under date of March 2, 1936, relating to syndicated health articles in newspapers, was read, together with reply thereto as formulated by the Special Committee appointed by the Executive Committee.

After discussion, it was moved by Councilor Ullmann, seconded by Chairman of Public Relations Committee Dukes, that the letter be sent in the form approved by the Council and that it be signed by the chairman of the Council. Carried.

Doctor Wilson voted in the negative.

4. **Delegates to American Medical Association.**—The attention of the Council was called to a violation of a by-law by the action taken at the last meeting of the Council whereby a new delegate was appointed to fill the vacancy caused by the resignation of Dr. Junius B. Harris.

It was moved by President Peers, seconded by Councilor Schaupp, that the action of the Council taken at its one hundred and fortieth meeting to fill the vacancy caused by the resignation of Delegate Harris be rescinded. Carried.

5. **Code of Disciplinary Procedure.**—William W. Roblee, chairman of the Committee on Disciplinary Procedure, presented the latest draft of the Code of Disciplinary Procedure, which was discussed in detail.

A discussion of Section 3, Subsection 6, governing "Rules of Hearing, Duties of Referee, Advice as to Procedure Only," was had and on motion of Speaker Roblee, seconded by Councilor Gibbons, the section was approved as amended. Carried.

Doctors Peers and Schoff voted in the negative.

It was moved by Councilor Ullmann, seconded by Councilor Kiger, that the report of the Committee on Proposed Amendments to the By-Laws Governing Disciplinary Procedure for County Societies, be adopted as a whole. Carried.

It was moved by President Peers, seconded by Councilor Gibbons, that a vote of thanks be extended the committee for the splendid work accomplished. Carried.

It was the sense of the Council that the report be published in the Preconvention Bulletin.

6. **Dues of Association.**—The secretary read a letter from the Kern County Society signifying its willingness to voluntarily raise State Association dues $2.50 per member; and stated that remittances for that amount per member had been received.

It was moved by Councilor Schaupp, seconded by Councilor Gibbons, that the Kern County Medical Society be notified that the Council has no authority to accept these additional dues until the House of Delegates acts, and the secretary was directed to return the overpaid dues with an explanatory letter. Carried.

7. **Division of Practice of Medicine.**—Correspondence was presented from the American Medical Association regarding the division of the practice of medicine into professional and technical parts. The secretary presented a statement containing the views of the Association, which statement had been prepared as a result of the American Medical Association's request for further elucidation of our attitude.

It was moved by Councilor Ullmann, seconded by Councilor Gibbons, that in view of the fact that the House of Delegates of the California Medical Association has gone on record stating that diagnostic and therapeutic laboratory procedures are the practice of medicine, the statement as revised by the Council be sent to all delegates of the American Medical Association. Carried.

8. **Nineteen Hundred Thirty-Seven Annual Meeting.** The Council decided that the invitation of the San Francisco County Medical Society to the California Medical Association to hold its 1937 annual session at San Francisco should be considered at the Coronado meeting.

9. **Invitation to the American Medical Association.**—A letter from the San Francisco County Medical Society requesting the California Medical Association to extend an invitation to the American Medical Association to hold its 1938 annual session in San Francisco was read.

It was moved by Councilor Schaupp, seconded by Chairman of Public Relations Committee Dukes that the California Medical Association invite the American Medical Association to hold its 1938 annual session in San Francisco. Carried.

10. **Retired Membership.**—The secretary presented membership data and requests from county societies for the granting of retired membership to five members of our Association.

It was moved by Councilor Ullmann, seconded by Chairman of Public Relations Committee Dukes, that retired membership in the California Medical Association be granted to William K. Lindsay, member of the Sacramento County Medical Society; Elmer William Weirich, member of the San Joaquin County Medical Society; and Carl Renz, Harry Spiro, and William Quinn, members of the San Francisco County Medical Society. Carried.

11. **San Diego Society.**—A letter from the San Diego County Medical Society was presented. The letter was referred for consideration at the annual session at Coronado.

It was moved by Councilor Wilson, seconded by Councilor Schaupp, that the secretary write a letter to each county society stating there is considerable variance between the provisions of the State and County constitutions and by-laws and that all county societies should rectify this so that their provisions will conform to the State Association's Constitution and By-Laws, and that in the event they see fit to adopt disciplinary action, procedure should conform to by-law provisions. Carried.

12. **Membership.**—The secretary presented correspondence regarding a former member of the San Francisco County Society now residing in Kern County.

It was moved by Councilor Gibbons, seconded by Councilor Ullmann, that the secretary be instructed to ascertain the details in this case, consult with the general counsel as to the legal status, and advise the member accordingly. Carried.

13. **Hospital Insurance.**—A communication from the American Medical Association relating to a letter signed by Dr. Howard Johnson, purporting to have had the consideration of the San Francisco County Medical Society and the California Medical Association, was presented.

It was moved by Speaker Roblee, seconded by Councilor Gibbons, that the correspondence be filed. Carried.

The secretary was authorized to write the American Medical Association stating that the matter did not come through the County or State Association.

The secretary presented correspondence from the San Mateo County Medical Society relating to a certain hospital insurance company soliciting policyholders in that community and signifying the intent of the San Mateo Society to abide by the policies and regulations of the State Association.

The general counsel read a letter he had prepared in reply to a request for information received from Doctor Graham, concerning Doctor Graham's possible remuner-

* The minutes of the two hundred and fortieth meeting of the Council of the California Medical Association were printed in the February, 1936, issue of CALIFORNIA AND WESTERN MEDICINE, page 120.

ation for roentgenologic work done for policyholders of the Intercoast Hospital Insurance Company.

It was moved by Councilor Schaupp, seconded by Councilor Ullmann, that the general counsel furnish the information requested and that the letter of reply, which the Council approved, be used as a basis for answering similar inquiries. Carried.

14. **Honorary Members.** — It was moved by Editor Kress, seconded by Councilor Kiger, that the secretary be instructed to review the list of honorary members and that the Executive Committee be given power to act. Carried.

15. **Roster of Members.**—It was moved by Editor Kress, seconded by Councilor Ullmann, that the roster of members of the California Medical Association be published in the JOURNAL next year in the same form previously employed. Carried.

16. **Current Medicine.**—It was the sense of the Council that, in accordance with the request received, *Current Medicine* be granted the privilege of reprinting articles from CALIFORNIA AND WESTERN MEDICINE upon approval of the editor and the secretary.

17. **Recess.**—At this point the Council recessed until 8 p. m.

* * *

18. **Call to Order.**—The Council was called to order by T. Henshaw Kelly, chairman, with the following members present: President Peers, Speaker Roblee, Chairman of Public Relations Committee Dukes, and Councilors Kelly, Schaupp, Emmons, Ullmann, Anderson, Phillips, Hamlin, Schoff, Rogers, Wilson, Tanner, Kiger, Gibbons, Harris, Editor Kress, Secretary Warnshuis, and General Counsel Peart.

Absent: Councilor Howson and President-elect Pallette, on account of illness.

19. **Malpractice Insurance.** — Dr. George G. Reinle, chairman of the Special Committee, being unable to attend the meeting on account of illness, the secretary submitted a progress report for the committee. A letter from Doctor Reinle, suggesting that further investigations be pursued, was read, and a report on the replies to questionnaires submitted. Consideration was given to a letter from John G. Johnston & Company.

It was moved by Chairman of Public Relations Committee Dukes, seconded by Councilor Schoff, that a vote of thanks be extended to Doctor Reinle and his committee for the work accomplished and that the committee be requested to complete the report. Carried.

It was moved by Editor Kress, seconded by Councilor Gibbons, that the report of the Malpractice Committee be received and that Doctor Reinle be requested to add to his committee the president, the president-elect, the speaker of the House of Delegates, and the chairman of the Council, and that a report be made at the first meeting of the Council at Coronado. Carried.

It was moved by Councilor Ullmann, seconded by Councilor Phillips, that notice of termination of services as insurance broker be sent to John C. Johnston & Company, as provided in the original agreement, and that he be thanked for his services. Carried.

20. **Scientific Sections.**—Morton R. Gibbons presented a report on scientific sections at annual sessions, and it was moved by Councilor Ullmann, seconded by Chairman of Public Relations Dukes, that a copy of the report be sent to each member of the Council for his consideration and suggestions and that the matter be taken up at the first meeting of the Council at Coronado. Carried.

21. **Francis vs. Nelson.**—The general counsel reported on the present status of the case of *Francis* vs. *Nelson*.

22. **Legal Expense.**—The general counsel asked that the travel and hotel expense of his associate, Mr. H. Hazzard, be paid while in attendance at the Coronado meeting.

It was moved by Speaker Roblee, seconded by Councilor Anderson that the traveling and hotel expense of Mr. Hazzard entailed in his attendance at the Coronado session be paid, subject to the approval of the Auditing Committee. Carried.

23. **Tax-Supported Hospitals.** — Councilor Anderson, chairman of the Committee on Tax-Supported Hospitals, submitted a progress report for his committee.

It was moved by Councilor Schaupp, seconded by Councilor Phillips, that the Council ask that the privilege of the floor be granted Mr. Alfred Siemon during the meeting of the House of Delegates at Coronado. Carried.

It was moved by Councilor Harris, seconded by Councilor Ullmann, that each member of the California Medical Association be furnished the tax charts published by the State Chamber of Commerce for use in his reception room and that the cost of postage be financed by the Association. Carried.

24. **Official Visits.**—It was moved by Councilor Schaupp, seconded by Councilor Ullmann, that the secretary and the general counsel be authorized to go to any county society whenever their presence is requested if, in the judgment of the chairman of the Council, it is considered necessary. Carried.

25. **Western Hospital Meeting.** — It was moved by President Peers, seconded by Councilor Rogers, that a speaker be provided for the meeting of the Western Hospital Association and that his selection be left to the chairman of the Council and the secretary. Carried.

26. **Recess.**—At this point adjournment was taken until 9:45 a. m., Saturday, April 11.

* * *

27. **Call to Order.**—The meeting was called to order at 9:45 a. m. by Chairman Kelly, with the following members present: President Robert A. Peers, Speaker William W. Roblee, Chairman T. Henshaw Kelly, Councilors K. L. Schaupp, C. L. Emmons, Carl R. Howson, Henry J. Ullmann, A. E. Anderson, A. L. Phillips, C. E. Schoff, H. L. Rogers, H. H. Wilson, William H. Kiger, M. R. Gibbons, J. B. Harris, Chairman of Public Relations Committee Dukes, Secretary F. C. Warnshuis, and General Counsel Hartley F. Peart.

Absent: Councilors C. O. Tanner, O. D. Hamlin; and President-elect Edward M. Pallette, on account of illness.

The Council having reviewed the action taken by that body on Friday, April 10, approved its inclusion in the official minutes of the one hundred and forty-first meeting of the Council.

28. **Appeal from Kern County Medical Society Disciplinary Action.**—The hour of ten o'clock having arrived, the chairman announced that the Council would hear the appeal of Doctors Joe Smith, J. M. Kirby, Homer Rogers, and R. M. Jones, from the action of the Kern County Medical Society in expelling and suspending them from membership.

Doctors Joe K. Smith and R. M. Jones appeared in person with their attorney, Mr. Harry M. Conron. Mr. Conron stated that he also represented Homer Rogers and J. M. Kirby, who were unable to be present.

Dr. Louis A. Packard appeared on behalf of the Kern County Medical Society.

Both parties were heard by the Council. (See official record.)

* * *

At the conclusion of the arguments the Council went into executive session for the purpose of reading the Kern County record. The entire record was read to the Council, together with the original charges. The several exhibits were reviewed.

Deliberation was then adjourned pending the receipt of the summarizing briefs that were to be submitted by both parties.

29. **Recess.**—At this point a recess was declared until 1:45 p. m.

* * *

30. **Call to Order.**—The meeting was called to order by the chairman of the Council, with the following members present: President Robert A. Peers, Speaker W. W. Roblee, Chairman T. Henshaw Kell, Councilors C. L. Emmons, Carl R. Howson, Henry J. Ullmann, A. E. Anderson, A. L. Phillips, C. E. Schoff, H. L. Rogers, H. H. Wilson, William H. Kiger, J. B. Harris, Chairman of Public Relations Committee Charles A. Dukes, Secretary F. C. Warnshuis, and General Counsel Hartley F. Peart.

Absent: Councilors C. O. Tanner, O. D. Hamlin, M. R. Gibbons and Karl L. Schaupp, Editor George H. Kress; and President-Elect E. M. Pallette on account of illness.

31. **Appeal from San Francisco County Medical Society Disciplinary Procedure.**

The hour of two o'clock having arrived, the chairman announced that the Council would now hear the appeal of Doctors Ferd W. Callison, Harry M. Davis, Herbert Cohn, Edward M. Talbott, Bertram Stone, J. F. Pressley, George G. Heppner, Frank E. Stiles, J. L. McClure, and Louis Clive Jacobs, from the action of the San Francisco County Medical Society in expelling and suspending them from membership.

He further announced that Councilors Gibbons and Schaupp would be excused from the meeting, since they were disqualified from acting in the matter of this appeal because of previous direct connection with the action of the San Francisco County Medical Society. These councilors then left the meeting.

Mr. Albert Rosenshine, an attorney, stated that he represented all the appellants who were present.

Dr. Stanley Mentzer represented the San Francisco County Medical Society.

Arguments were made by both parties. (See official record.)

Both parties agreed to submit briefs.

* * *

Council convened in executive session for deliberation. At 4:15 p. m. deliberation was adjourned to be resumed at the next Council meeting.

32. **Next Meeting of Council.**—The next meeting of the Council was fixed as 2 p. m. Sunday May 24, 1936, at Coronado.

33. **Adjournment.**—There being no further business to come before the Council, on motion of Anderson, seconded by Phillips, the Council adjourned.

T. Henshaw Kelly, *Chairman.*
F. C. Warnshuis, *Secretary.*

COMPONENT COUNTY MEDICAL SOCIETIES

HUMBOLDT COUNTY

The Humboldt County Medical Society held its regular monthly meeting on the evening of April 2 at the General Hospital, with the vice-president, Allan Watson, presiding. Twenty members were present. We had as visitors, Superior Judge Harry Falk and Doctors R. A. Cushman and R. B. Toller of the Mendocino State Hospital at Talmage.

On motion, a letter was directed forwarded to Governor Merriam commending him for the reappointment of Dr. Charles B. Pinkham and former members to the State Board of Medical Examiners.

Dr. Maurice M. Hoilien was elected to membership in the Society.

Dr. Ruggles A. Cushman spoke on *Various Degrees of Psychosis.*

After a very enjoyable dinner the meeting adjourned.

Lawrence A. Wing, *Secretary.*

MARIN COUNTY

The regular meeting of the Marin County Medical Society was held at the Marin Golf and Country Club on March 26. Councilor Henry Rogers was present.

Dr. Edward Shaw of San Francisco gave a very interesting talk on *Prophylaxis of the Diseases of Childhood.*

Carl W. Clark, *Secretary.*

ORANGE COUNTY

Twenty-three members of the Orange County Medical Association attended the Tri-County Postgraduate Conference at Riverside on March 22.

There will be no meeting for the month of April, as the date of the Tri-County Postgraduate Conference at San Bernardino is on the same date as our regular meeting. It is the plan that our society go to the San Bernardino conference in a body. The Society feels that these postgraduate meetings are of inestimable value to us because of the high type of, and well-qualified men who are giving the lectures.

I am very happy to announce at this time that we have only seven delinquent members in the Society who have not paid their 1936 dues.

C. Glenn Curtis, *Secretary.*

PLACER COUNTY

The Placer County Medical Society held its February meeting at the Freeman Hotel, Auburn. The meeting was called to order by President Louis E. Jones at 8:30 p.m.

In addition to President Jones, there were present the following members and visitors:

Members—Doctors Vinks, Padgett, Atkinson, Mackay, Thoren, Lewis, Briner, Peers, Miller, and Russell.

Visitors—Dr. Emile Holman, professor of surgery, Stanford University School of Medicine, San Francisco; Dr. Frank Macdonald, president of the Sacramento Society for Medical Improvement; and Doctor Ward.

The application of Dr. Clarence Quinan of Nevada City for transfer of membership from the San Francisco County Medical Society was read and unanimously accepted. Doctor Quinan thus becomes a member of the Placer County Medical Society.

The application of Dr. Richard T. Hamer of Grass Valley for membership was read. The secretary stated that the matter had been referred to Doctor Warnshuis, State Secretary.

Following the reading of communications, Dr. Louis E. Jones and Dr. Robert A. Peers gave reports on the January 18 meeting in San Francisco between county officers and state officers.

Dr. R. C. Atkinson of Colfax reported a case of glioma discovered during his examination of a three-year-old child, which diagnosis was confirmed by Dr. William M. Miller of Auburn. The diagnosis was confirmed at operation.

President Jones then introduced Dr. Emile Holman, who delivered an illustrated lecture on *The Management of Gastric Ulcer and Its Complications—Medical and Surgical Considerations.*

In his address Doctor Holman pointed out that neither the patient nor the lesion will permit the adoption of a standard procedure. Moreover, one must recognize that the problems presented by duodenal are quite distinct from those presented by gastric ulcer.

Ulceration of the greater curvature is, in ninety-nine cases out of one hundred, malignant and should be so treated, when discovered, by subtotal resection. The fact that 4 to 10 per cent of ulcers on the lesser curvature may, when first seen, be malignant makes it imperative that each peptic ulcer encountered must be considered potentially malignant unless proved otherwise.

As to duodenal ulcer, the most conservative attitude possible must be adopted, so far as surgical measures are concerned; but the most radical attitude possible, so far as medical measures are concerned. Such a medical regimen should exclude such articles from the diet as lead to increased acidity, namely, ingestion of meat should be reduced to a minimum, the use of condiments prohibited, and the use of tobacco curtailed to one cigarette after each meal. Smoking should not be permitted when the stomach is empty; alcohol, likewise, should be avoided. Small meals with intermediate nourishment should be conscientiously followed. Excessive fatigue should be avoided by breaking the day's routine with a half-hour's rest at noon.

Before subjecting any patient to operation, certain preliminary measures are in order: Dental sepsis should be eliminated; x-rays are indicated to determine the presence and degree of stenosis; a chemical analysis of the gastric secretion is indispensable to determine the degree of acidity, since the degree of acidity is a very important determining factor in the choice of operation. When confronted with obstruction, intractable bleeding, perforation, or penetration into surrounding structures, with the re-

sultant uncontrollable pain, surgical assistance is obviously needed, but very careful judgment is necessary in the choice of one's operation.

A simple gastro-enterostomy in the presence of hyperacidity is definitely contra-indicated. In an elderly patient with a low or reduced acid, a gastro-enterostomy is a permissible procedure, and the more chronic the lesion the better the results.

In the presence of a hyperacidity the possible procedures are:

1. Pyloroplasty, with excision of at least one-half of the pylorus, in the hope that regurgitation of the alkaline duodenal secretions into the stomach will take place.

2. A partial gastrectomy and gastro-enterostomy, aimed at reducing the acid-secreting area of the stomach.

Surgery should be followed by continued observation of the patient and medical regimen for a long period.

Doctor Holman's address evoked general discussion, which was participated in by practically everyone present.

ROBERT A. PEERS, *Secretary.*

❋

SAN JOAQUIN COUNTY

A special meeting of the San Joaquin County Medical Society was called to order at 8:15 p. m., Thursday, March 19, by President T. C. O'Connor. Twenty-two members were in attendance.

A communication from Dr. F. C. Warnshuis, concern- the endorsement of the Inter-Coast Hospital Insurance Company's policies and plans by the San Joaquin County Medical Society, was read. A communication from Dr. F. A. MacDonald of the Sacramento Society for Medical Improvement concerning the Inter-Coast Hospital Insurance Company's plan to enter this county and sell policies for hospital insurance, was read.

The meeting was turned over to Doctor MacDonald and Mr. Bowman, the manager of the Inter-Coast Hospital Insurance Company. They presented the salient facts and policies of the Inter-Coast Hospital Insurance Company and answered many questions.

It was the consensus of opinion among the members that until the California Medical Association had arrived at some understanding with the radiologists and pathologists that no recommendation by the Society be given to the Insurance Company at this time.

A motion was made by Dr. Dewey Powell, seconded by Doctor Peterson, that the Society withhold its endorsement and refer the matter to the Board of Directors and the Committee on Public Relations for further study. The motion was carried.

President O'Connor requested that the May meeting be devoted to legislative matters.

P. B. GALLEGOS, *Secretary pro tem.*

* * *

The regular meeting of the San Joaquin County Medical Society was held April 2 in the Medico-Dental clubroom.

The customary supper meeting was held at the Hotel Wolf at 6:15 p. m., preceding the regular meeting. There were twenty-two members and guests present. There was no prepared paper given at this meeting, the scientific program being a series of films on rectal and spinal anesthesia, presented by an eastern drug firm.

President T. C. O'Connor called the regular meeting to order at 8:15 p. m.

The petition of Dr. Thomas W. Hagerty for membership being reported on favorably by the Membership Committee and there being no objection from the floor, he was declared a member.

A motion was made by Dr. Dewey Powell, seconded by Doctor Peterson, that the question of the San Joaquin County Medical Society inviting the California Medical Association to meet in Stockton in 1937 be tabled. The motion carried.

A motion was made by Dr. Dewey Powell, seconded by Doctor Boehmer, that the San Joaquin Chapter of the American Red Cross be given $50 by the Society for use in the flood relief. The motion was unanimously carried.

The papers of the evening were presented by Dr. Edward Towne of Stanford University, on *Treatment of Acute Head Injuries,* and Dr. Walter Schaller of Stanford University, on *Discussion of Complications and Sequelae Following the Treatment of Acute Head Injuries.* The papers were discussed by Doctors Pinney, O'Connor, D. Powell, and Dameron.

G. H. ROHRBACHER, *Secretary.*

❋

SANTA BARBARA COUNTY

The regular meeting of the Santa Barbara County Medical Society was held on Monday evening, April 13, with President Gray presiding.

The speaker of the evening, Dr. Alvin Foord of Pasadena, was introduced by Doctor Wills.

Doctor Foord divided his talk into two parts, first discussing *Normal Hematology,* then following with *Anemias,* their classification, etiology, and diagnosis.

The paper was discussed by Doctors Evans, Nuzum, Ullmann, Findley, and Cavanaugh.

Doctor Ussher reported that the health department wished to put on a diphtheria immunization campaign during the first week in May, and desired the coöperation of the Society.

Doctor Freidell reported on the proceedings of the last Council meeting.

Doctor Ullmann reported upon the transactions of the State Council, and especially stressed opposition to the petition being circulated to open county hospitals to those other than indigents.

Doctors Clinton Wilson, Russel Gates, and H. C. DeVighne were unanimously elected into the Society.

WILLIAM H. EATON, *Secretary.*

❋

SISKIYOU COUNTY

The regular meeting of the Siskiyou County Medical Society was held at the Yreka Inn at Yreka on March 8.

The meeting was called to order by President C. C. Dickinson.

Dr. F. W. Martin's application for membership was read. A motion was made, seconded and passed, that he be admitted to membership upon payment of his dues.

There was no old or new business to discuss. Owing to the epidemics now present in the county the meeting was very poorly attended. It was, therefore, moved, seconded and passed, by the members present that the next meeting of this society be postponed until May.

E. F. CARLSON, *Secretary.*

❋

TULARE COUNTY

The March meeting of the Tulare County Medical Society was held held at Motley's Café Sunday, on the 15th. Dr. J. C. McClure presided.

Doctor Betts reported on the question of postgraduate clinics, and suggested a centralized meeting for the Fourth Councilor District be held rather than individual meetings.

On motion, a publicity committee was appointed to report ways and means of combating the practice of wholesale immunization and vaccination, and to advance a possible solution. Doctors Weiss, Rosson, and Zumwalt are to serve on this committee.

Dr. T. W. Cornwall of San Francisco presented a paper on *Pediatric Problems.* He stressed the important differences in child care as compared with adult reactions. New conceptions of pediatric problems and recent diagnostic and therapeutic aids were outlined in a most instructive manner.

KARL F. WEISS, *Secretary.*

❋

VENTURA COUNTY

The February meeting was held in Santa Barbara at the Mar Monte Hotel, in conjunction with the Santa Barbara County Medical Society, on the 19th. The meeting was addressed by President Peers and State Secretary Warnshuis.

The regular March meeting was held at the Ventura County Country Club on the 10th.

Following the dinner Doctor Shore called the meeting to order. A symposium was then presented by Doctors Evans, Elliot, and Stone, covering the various phases of peripheral arterial disease.

A brief report of the first annual Conference of County Secretaries and Officers and Council of the California Medical Association and Conference on Hospital Insurance was given by the secretary.

In regard to postgraduate courses, the members prefer to have them held in Santa Barbara. Since we favor holding these courses there, Doctor Hendricks suggested that the date and subjects be left to the Santa Barbara Society, as our members do not have any particular preference for time or topics.

Doctor Coffey suggested that hereafter a brief résumé of our meetings be given to the local newspapers. This résumé will include the names of the members attending.

Doctors Achenbach and Broughton were appointed as the April Program Committee.

* * *

The regular meeting of the Ventura County Medical Society was held at the Ventura County Country Club on Tuesday, April 14.

Following the dinner the meeting was called to order by President Shore.

Doctor Ullmann spoke on the increasing cost of malpractice insurance and of the efforts being made by the State Association to counteract this increase. He urged that all members send in their questionnaires at once. He also suggested that we be sure our by-laws correspond to those of the California Medical Association's regarding the expulsion of members. He further warned us of the new movement under way in regard to open county hospitals and urged that we be prepared to start a plan of hospital insurance in the near future as a means of counteracting said movement.

Dr. Rodney Atsatt was introduced by Dr. D. G. Clark, program chairman, and gave an interesting paper on *Spinal Fractures*, followed by slides. Discussion was started by Dr. Sterling Clark.

The business meeting was opened with a discussion of malpractice insurance. Dr. Sterling Clark suggested that we adopt a conservative course and be certain that such a plan would give us adequate protection without the cost being too high.

A motion was made by Dr. C. Smolt, seconded by Doctor Homer and unanimously passed, that the delegate use his own judgment for the best interests of the Society.

A motion was made by Dr. Sterling Clark, seconded by Dr. S. Smolt and unanimously passed, that the delegate be allowed $40 expense money.

A motion was made by Dr. Grant Clark, seconded by Doctor Coffey, that the July and August meetings be omitted. The motion carried.

Doctor Homer was appointed chairman of the Public Relations Committee. Doctors Achenbach and Broughton were appointed on the Program Committee for May.

Mr. Ben Read is to speak at the June meeting.

A. A. Morrison, *Secretary.*

CHANGES IN MEMBERSHIP

New Members (51)

Alameda County.—Alfred B. Berkove, John Joseph Carden, Robert Hector, Eugene W. Kenney, J. W. Peck, Charles C. Stevenson, F. Rene Van de Carr, George E. Walton, Richard A. Young.

Butte County.—A. L. Derbyshire.

Humboldt County.—Stephen Fleming.

Imperial County.—William A. Clark, John L. Parker.

Los Angeles County.—Carsten Russell Anderson, William Baker, Robert L. Blackmun, Paul C. Blaisdell, Virginia M. Cobb, Michael R. Godett, Channing W. Hale, Horace A. Hall, L. L. Henry, David Hershberg, S. P. Johnson, John Clifton Jones, Charles J. Lopez, Alden H. Miller, Albert A. Peterson, Esther Somerfeld, Samuel J. Sperling, Robert Leo Stern, Homer M. Walker, A. W. Williams.

Marin County.—Cornwall C. Everman, R. B. Hartman.

Napa County.—Mary C. McReynolds.

Riverside County.—Lawrence E. Brown.

San Francisco County.—Olga Bridgman, Leon Goldman, Asher Donald Havenhill, Edward A. Levin, Salvatore P. Lucia, Horace J. McCorkle, John J. McKay, Mary B. Olney, Joseph M. Swindt.

San Joaquin County.—Thomas W. Hagerty, H. H. Kanagawa.

San Mateo County.—E. W. Bulley.

Santa Clara County.—Roland G. Breuer.

Solano County.—Joseph I. Porter.

Transferred (4)

Louisa Hemken, from San Bernardino County to Los Angeles County.

Thomas F. Thorp, from Humboldt County to San Joaquin County.

Clinton A. Wilson, from Monterey County to Santa Barbara County.

Howard A. Wood, from Los Angeles County to Riverside County.

Resigned (3)

Eugene R. Lewis, from Los Angeles County.

Frank R. Morgan, from Los Angeles County.

Louis Reinard, from Los Angeles County.

In Memoriam

Burg, Beatrice Victoria. Died at Los Gatos, April 4, 1936, age 43. Graduate of the University of Texas School of Medicine, Galveston, 1922. Licensed in California in 1923. Doctor Burg was a member of the Alameda County Medical Association, the California Medical Association, and the American Medical Association.

✝

Drysdale, George Nelson. Died at Crescent City, March 15, 1936, age 70. Graduate of Dalhouse University Faculty of Medicine, Halifax, Nova Scotia, 1891. Licensed in California in 1893. Doctor Drysdale was a member of the Sacramento Society for Medical Improvement, the California Medical Association, and a Fellow of the American Medical Association.

✝

Hare, George Andrew. Died at Fresno, April 4, 1936, age 78. Graduate of the University of Michigan Medical School, Ann Arbor, 1887. Licensed in California in 1892. Doctor Hare was a member of the Fresno County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

✝

Heald, Alfred Henry. Died at San Mateo, March 2, 1936, age 39. Graduate of the University of California Medical School, San Francisco, 1931, and licensed in California the same year. Doctor Heald was a member of the San Mateo County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

✝

Striegel, Raymond John. Died at Long Beach, February 26, 1936, age 39. Graduate of the University of Buffalo School of Medicine, 1921. Licensed in California in 1927. Doctor Striegel was a member of the Los Angeles County Medical Association, the California Medical Association, and the American Medical Association.

C. M. A. DEPARTMENT OF PUBLIC RELATIONS†

Public Health

In theory every physician is a public official just as the attorney is an officer of the court. In public health this theory should be a fact. Personal preventive medicine, that preventive medical service arising from the contact of the physician with his patient, from the physician's intimate knowledge of the patient's life and needs, is stressed too little in private practice. Yet the important problems in public health today are to be solved only by such relationships and the services arising therefrom.

It must follow that the activities of the public health agency should be concentrated upon education in two directions: (1) Education of the profession, to the end that it will be better able to provide the public's preventive medical needs; and (2) education of the public, to the end that it will seek preventive medical service. This is participation in a form welcome to the agency and the health departments as well as the public. Only through such participation may the hope, "every physician a health officer," be realized.

This recommendation is advanced for the consideration of individual members and ultimate action by county societies. It is anticipated that in the near future a sustained movement will be inaugurated to make every physician a practicing health officer.

* * *

Ask Him?

Certain editors of local and farm journals, supervisors, heads and members of farm bureaus and granges, and aspirants for public office, have been presenting specious arguments in favor of opening county hospitals to all peoples. It is a matter of pity that these proponents in their writings and talks reflect a woeful lack of information as to the principles involved and the basic factors that are related to the question. Apparently, a quest has been determined and reasons why it should be obtained are being moulded and distorted regardless of true facts and conditions.

The suggestion is made that at every opportunity the following facts should be presented to refute these distorted and baseless statements. Interview local editors and invite them to acquaint their readers with dependable actualities.

Article IV, Section 31, of the Constitution of the State of California, forbids the use of public funds as gifts to private individuals. This section also forbids the legislature to enact a law appropriating public funds for private use or purposes. Initiatives cannot set aside the Constitution.

Given county hospital per diem patient costs are not accurate or true. In figuring them, costs of investment, interest, and certain supplies, are omitted. The taxpayer pays the difference.

It is frequently stated that private hospitals are *owned* by doctors. This is untrue, as comparatively few private hospitals are owned by doctors.

Professional services available and rendered in county hospitals are not comparable to those rendered in private hospitals nor is the staff properly manned.

Many doctors on services in county hospitals are not paid for their professional attendance on patients.

Many patients admitted to county hospitals could pay for hospital care in private hospitals were they but willing to forego de luxe private rooms and private nurses.

Many patients admitted to county hospitals could pay for physicians' services. Physicians are quite willing to adjust their fees to the patient's ability to pay.

Ask him—the proponent—what he thinks of the following plan, inasmuch as the trend is to endeavor to obtain all one can for nothing or less than cost.

There are many acres of land tax defaulted and years in tax arrears. There are hundreds on relief or on work projects. Why not have the county or state take over these lands? Build barracks or houses on them. Send those on relief to these farms and let them till this land. Plant acres on acres of food products. Harvest the crops and store them in central or community warehouses. Place livestock, cows, sheep, pigs, chickens, in the pastures. Send the milk, eggs, and meat to the community warehouse. Then let every individual, without regard to his financial resources, come and buy milk at two cents a quart, eggs at six cents a dozen, meat at five cents a pound, and other products at prices that equal costs of production. There should be no farmer profit. Compete with the farmer. It is a right we all have!

We are not fostering this suggestion. It is cited as being as tenable and as exemplary as the reasoning of those who demand hospital care in county hospitals at cost.

There is need to impart actual conditions to those who argue erroneously. They need to be shown why they should not repeat an error similar to the one they made when they voted large sums and increased taxes to build county hospitals that are luxurious, expensively equipped and costly to operate for what the constitution, the law and the courts declare can be used only for the care of the poor, the indigent, or in certain emergencies.

* * *

Division of Medicine Into Professional and Technical Branches

The California Medical Association, through its delegation to the American Medical Association, sponsors the following resolution:

WHEREAS, Certain organized lay groups in this country are endeavoring to arrange for the provision of diagnostic medical services along with and as part of hospital services; and

WHEREAS, The provision of such diagnostic medical services will inevitably foster fundamental changes in the practice of medicine; and

WHEREAS, Such changes in the practice of medicine may well result in deterioration of our present medical standards and especially in deterioration in the quality of medical care furnished to hospital patients; now, therefore, be it

***Resolved,* That it is the official policy of the House of Delegates of the American Medical Association that it disapproves of the division of any branch of medicine into technical and professional portions; and be it further**

***Resolved,* That copies of this resolution shall be brought to the attention of the American Hospital Association and its affiliated groups, to the end that existing arrangements permitting division in medical practice be terminated as speedily as possible.**

At the 1935 meeting of the California Medical Association, the following resolution was adopted:

WHEREAS, The California Medical Association is of the firm and unalterable opinion that the practice of medicine at all times should be confined to duly licensed physicians and that it recognizes the practice of radiology and clinical pathology as the practice of medicine; and

WHEREAS, The California Medical Association is of the opinion that a hospital conducting a department of radiology and/or clinical pathology should do so only to the interest of the patient and not for the purpose of profit, and that every hospital should bear in mind that in arranging for diagnostic and/or therapeutic services by such departments it does so as a matter of convenience and not as an essential right; therefore, be it

***Resolved,* That the Council of the California Medical Association be and hereby is authorized to take such steps as it sees fit to establish mutually equitable relations between hospitals, radiologists and clinical pathologists to the end that the practice of medicine shall be conducted by physicians and not by hospitals; provided, however, that the California Medical Association is unalterably opposed to the division of any branch of medical practice, such as radiology or pathology, into technical and professional portions; and be it further**

***Resolved,* That the secretary of the California Medical Association be and hereby is directed to send a copy of this resolution to each of the several hospitals in the state.**

In California and most other states, many hospitals, whenever possible, have employed roentgenologists and clinical pathologists on salary or commission and have actively competed with legally practicing specialists in

† The complete roster of the Committee on Public Relations is printed on page 2 of the front advertising section of each issue. Dr. Charles A. Dukes of Oakland is the chairman, and Dr. F. C. Warnshuis is the secretary. Component county societies and California Medical Association members are invited to present their problems to the committee. All communications should be sent to the director of the department, Dr. F. C. Warnshuis, Room 2004, Four Fifty Sutter Street, San Francisco.

these fields for all of the ambulatory patients in the community. The considerable profit made from these departments frequently goes to pay deficits incurred in other departments of the hospitals.

Finding, in California at least, that all diagnosis and treatment rendered in these specialties is the practice of medicine and cannot be legally furnished by hospitals, many hospitals are developing plans for "hospital insurance," are insisting that these specialties can be divided into "professional and technical services." This is their own term and they demand that organized medicine recognize their right to sell, in these "hospital insurance" policies the "technical services" or, as they euphemistically and confusingly prefer to call them, "facilities" of these departments. The "facilities" include the taking of x-ray films, the administration of intravenous, oral, rectal medication in order to obtain proper films, and the securing of various specimens for examination, all done by lay technicians without standard training or standing in law.

The House of Delegates of the California Medical Association firmly believes that no such division should be permitted, especially in newly created organizations of hospitals designed to furnish "hospital service." If condoned, as it has been in part, or permitted, then these technicians will be actively practicing medicine. When the beginning is made, does anyone know where the separation of medicine into professional and non-professional fields will stop?

It does not require a very large imagination to visualize the urologic cystoscope and catheter technician, electrocardiograph technician, otological technician, metabolic technician, pelvimetry technician, and so on *ad absurdum*. Laboratory and physiotherapy technicians are practicing medicine today. Approve or tolerate the professional and technical division of medicine and large numbers will invade the field, lower standards, and submerge medical science.

Anticipating the evil of a division, recognizing that diagnostic and therapeutic services require complete medical training, supervision and knowledge, the House of Delegates of the California Medical Association urges the medical profession to declare its position and assume a positive attitude.

The pleadings and fallacious arguments of some hospital administrators must not warp judgment. Their desire to hold fast to a revenue-producing practice that medicine has wrongly tolerated cannot be made to constitute a sound reason or justification for its continuation. A principle is involved that must be upheld and maintained inviolate. Specious arguments must not becloud the issue. Medicine is an entity that does not permit of division into technical and professional parts. The House of Delegates of the California Medical Association and the Council believe that national and state organizations should go on record by stating their position and the taking of necessary steps to quash this invasion of the field of medical practice.

* * *

Initiatives

Petitions are now being circulated to place upon the November ballot an amendment to the State Constitution that would, if passed, authorize supervisors to admit pay patients to county hospitals. The amendment is so broad that under it medical care cannot also be included.

Another petition is being circulated seeking to secure legislation by initiative that would enact the regulations and antivivisectionists have sought unsuccessfully by means of the bills they have had introduced in previous legislatures.

If the proponents and sponsors of these legislative measures succeed in obtaining the necessary signatures, then it will become incumbent upon those who are opposed to such legislation to engage in a campaign to defeat these two initiatives. It will not be an easy campaign.

Those signing the county hospital petition apparently have given but little if any thought to the tremendous increase in taxes that will be necessary to meet the operating costs of county hospitals. No consideration is given to the effect that will be had upon the type or quality of medical care. Other untoward factors are ignored.

The antivivisectionists cling to their former arguments and sentimental pleas.

Members are urged to embrace every opportunity to enlighten their acquaintances and patients and cause them to see why these proposals should be defeated.

THE WOMEN'S AUXILIARY TO THE CALIFORNIA MEDICAL ASSOCIATION†

MRS. THOMAS J. CLARK .....President
MRS. ELMER BELT.....Editor and Chairman of Publicity

County Auxiliary Reports

Alameda County.—The Woman's Auxiliary to the Alameda County Medical Association met at the Claremont Country Club for their March meeting on the 20th. A board meeting called for 10:30 o'clock preceded the luncheon hour. The afternoon program contained two lectures, both illustrated with most interesting pictures. Mr. Joseph De Costa, a sanitary engineer of the East Bay Water Company, spoke upon *What Is Behind Our Water Faucet*, and Mr. Harold Gray of the Mosquito Abatement District told of *The Control of Mosquitoes in Alameda County*. At a business session following the program, appointments for the Nominating Committee were made.

MRS. A. W. HENRY, *Publicity Chairman.*

* * *

Los Angeles County.—The Auxiliary was privileged to have Dr. George H. Kress, editor of CALIFORNIA AND WESTERN MEDICINE, speak before them at their monthly meeting, held on March 24 in the Association headquarters. Doctor Kress explained in detail the proposed basic science or qualifying certificate law, which will require an adequate scientific foundation for all students desiring to practice the healing art in California. If this proposed law goes into effect the title of doctor will be significant as denoting a certain standard of education, rather than the confusing term it now is. Doctor Kress concluded by saying that this law would make for the protection of the health and lives of the people of the state. The second speaker of the program was Dr. Emily F. Balcom of the Los Angeles Public Health Department, who presented a thought-provoking paper on the medical aspects of the prevention and control of social diseases.

During the business Mrs. Philip Stevens, chairman of the Nominating Committee, read the names of the proposed candidates for election to office for the ensuing year. The ballot reads: President, Mrs. Clifford A. Wright; first vice-president, Mrs. Simon Jesberg; second vice-president, Mrs. Edward M. Pallette; secretary, Mrs. Eric E. Larson; treasurer, Mrs. J. F. Friesen; and directors, Mrs. J. Martin Askey, Mrs. Mark A. Glaser, Mrs. John P. Nuttall, Mrs. W. H. Leake, Mrs. F. B. Settle, and Mrs. A. T. Newcomb. These officers will be installed at the May meeting.

Mrs. Walter Brem, speaking for the League of Women Voters, described the conditions in the Cambria Street School as unfit for the use of the crippled children who are assigned to it. Mrs. John V. Barrow, the Auxiliary president, requested Mrs. Arthur Annis, the secretary, to read a resolution to be presented to the Board of Education requesting that adequate facilities, in the way of proper school buildings, be provided.

Mrs. Edmund T. Remmen was a very gracious hostess at a membership tea held in her home in Glendale on Friday afternoon, March 20. Two new members were enrolled in the Glendale group.

The Long Beach Branch, at their monthly dinner meeting held in the Rainbow Tearoom on March 17, enjoyed

† As county auxiliaries of the Woman's Auxiliary to the California Medical Association are formed, the names of their officers should be forwarded to Mrs. Elmer Belt, chairman of the Publicity and Publications Committee, 2200 Live Oak Drive, Los Angeles. Brief reports of county auxiliary meetings will be welcomed by Mrs. Belt and must be sent to her before publication takes place in this column. For lists of state and county officers, see advertising page 6. The Council of the California Medical Association has instructed the editor to allocate two pages in every issue for Woman's Auxiliary notes.

a book review given by Mrs. Theodore Brewitt, city librarian.

The Auxiliary's Philanthropy Committee has made many delightful contacts by first calling on and later presenting Easter baskets to each of the thirty doctors and their families who are incapacitated by illness or old age. The committee has discovered among them some very definite needs and pressing problems which it is their hope to alleviate in part.

MRS. H. E. CROWE, *Corresponding Secretary.*

* * *

Marin County.—The regular monthly dinner meeting of the Woman's Auxiliary to the Marin County Medical Society was held on February 27 at the Marin Golf and Country Club. A large number of members and their guests were present. A talk on *Tuberculosis Prevention,* illustrated by slides, was given by Miss McGrail, Red Cross public health nurse, who is assisting in the tuberculin tests being given in the county schools. This was followed by a short business meeting, at which Mrs. Harry Hund gave a report of the State Board meeting of the Auxiliary held in Los Angeles earlier in the month.

The March meeting of the Woman's Auxiliary to the Marin County Medical Society was held on the 26th at the Marin Golf and Country Club, with Mrs. Harry Hund presiding in the absence of Mrs. Robert Furlong, the president. The speaker and guest of honor was Mrs. Thomas J. Clark, the state president, who gave a most interesting talk about the growth and aims of the Auxiliary. Mrs. E. Taylor Dykes of Oakland was also a guest of the society, and played two delightful compositions on the piano. After the program a short business meeting was held. CAROL FOWLER, *Publicity Chairman.*

* * *

Orange County.—At the April meeting of the Auxiliary held Tuesday, the 7th, at the home of Mrs. F. H. Gobar in Fullerton, the following officers for the coming year were elected: Mrs. K. H. Sutherland, president; Mrs. D. C. Cowles, vice-president; Mrs. G. Emmett Raitt, secretary; and Mrs. L. E. Wilson, treasurer. Delegates and alternates for the state convention in May were also chosen. Delegates included Mesdames Dexter Ball, D. C. Cowles, R. C. Green, and G. Wendell Olson. Alternates: Mesdames Merrill W. Hollingsworth, Harry Huffman, G. Emmett Raitt, and E. L. Russell. In her summary of work accomplished by different chairmen, Mrs. Green, president, spoke of the fact that the Auxiliary had forty-two members, six of them new, and that twelve yearly subscriptions to *Hygeia* had been given to organizations otherwise unable to take it.

Mrs. Hollingsworth introduced Dr. Nadina Kavinoky of Los Angeles, who discussed the various aspects of birth control. She spoke briefly of the development of the movement here and in England, China, Japan, and India; of the prevalence of abortion, its death toll, and its effects upon the family and society; and of the common lack of sex adjustment with its influence upon the children of the marriage. She said also that the wealth of the newer health literature on these problems, as well as the saner attitude toward childbirth, brought about by birth-control clinics, were tending to create a healthier mental state toward marriage in the younger generation.

Mrs. Gobar and her assisting hostesses, Mesdames D. C. Cowles, C. F. Kohlenberger, A. G. Nies, John Wehrly and R. P. Yeagle, then served tea, with the newly elected president and secretary presiding at the flower-laden table.

JESSIE Q. RAITT, *Publicity Chairman.*

* * *

Sacramento County.—The regular meeting of the Woman's Auxiliary to the Sacramento Society for Medical Improvement met at the home of Mrs. A. K. Dunlap on Tuesday, February 18, with the president, Mrs. Frederick N. Scatena, presiding. Mrs. Krull made a report on the library work at the county hospital, and asked for more books and magazines. Mrs. Binkley reported a membership of eighty-three. Mrs. Brendel reported that she had prepared and delivered for the Auxiliary a large basket of assorted fruits to Dr. and Mrs. Lindsay. The president asked for volunteers to aid during Safety-First Week. The Nominating Committee submitted the following ticket: For president, Mrs. E. O. Brown; first vice-president, Mrs. George Foster; second vice-president, Mrs. A. K. Dunlap; secretary, Mrs. William Van Den Berg; corresponding secretary, Mrs. John D. Lawson; for director, to replace Mrs. E. O. Brown, Mrs. Frank P. Brendel; for directors to serve two years, Mrs. Dave Dozier, Mrs. George Briggs, and Mrs. Leo Farrell.

Mrs. Thomas J. Clark of Oakland, the state president, was then introduced by Mrs. Scatena as the guest of honor. Mrs. Clark gave a short talk about the history of the organization and made a plea for the members to strive to uphold the interests of scientific medicine. The entire group enjoyed meeting our gracious state president and appreciated her coming to Sacramento. The program concluded with vocal selections by Mr. Joe O'Brien, accompanied by Mrs. Zue Pease, which were greatly enjoyed. The hostess, assisted by Mesdames George Briggs, Charles Vanina, Leo Farrell, Lewis H. Sandborn, C. E. Schoff, Proctor Day, and Paul H. Guttman, served a delicious tea.

SARAH L. BRENDEL, *Corresponding Secretary.*

* * *

At the March meeting of the Woman's Auxiliary to the Sacramento Society for Medical Improvement held on the 17th at the home of Mrs. Frank McDonald, Mrs. E. O. Brown was elected president. The other officers of the ticket selected to serve with her were also installed. Dr. Ruth Storer of Davis gave an interesting talk on flowers and formal gardens of Europe. Annual reports were submitted by the chairmen of committees. At the next meeting delegates will be elected to attend the state convention at Coronado the last of May. Refreshments were then served by the following hostesses: Mesdames Paul Christman, C. L. Bittner, Orrin Cook, Norris Jones, J. D. Coyle, Oscar Johnson, and Frank McDonald.

ALMA LAWSON, *Corresponding Secretary.*

* * *

San Francisco County.—The Woman's Auxiliary to the San Francisco Medical Society held its regular meeting at 2180 Washington Street on Tuesday, March 17. We were fortunate in having with us on that day Dr. Langley Porter, dean of the Medical School of the University of California. Doctor Porter spoke to us in a friendly and interesting manner, making clear the hardships and difficulties of the doctor's life, and offering some sound advice to the members of the Auxiliary.

The business meeting followed, during which plans for a card party were presented by Mrs. George Becker, social chairman. This card party is to be held in the home of the San Francisco Medical Society on Washington Street on Friday, May 8. All members and those eligible for membership in the Auxiliary are urged to be present on that day and further cement the bond of unity and understanding so necessary to a successful organization. Mrs. J. C. Geiger, the county president, then made the following additional appointments: Mrs. Lionel Player as chairman of Transportation, and Mrs. Frank Rodin as chairman of Organization and Social Welfare.

Mrs. Rodin submitted to the Auxiliary board the following tentative program of activities:

To create a speakers' bureau on health and public welfare subjects.

To make a study of public health, medical institutions, and social agencies in San Francisco.

To assist in programs on health in organizations other than the Woman's Auxiliary.

To contact and to coöperate with the Red Cross, the Parent-Teacher Association, and the Public Health League.

To participate in cultural and public health educational programs for the study of the history of medicine, the national and international public health services, and the biographies of the leaders in medicine.

To sponsor the broadcasting of a series of educational health talks.

To assist the chairman of *Hygeia* to develop an educational program for better health among school children by arrangements with the health director of the second district, California Parent-Teacher Association, whereby each unit shall subscribe to *Hygeia* for the use of the Health chairman, members, and teachers.

To join the chairman of Legislation in the study of bills pertaining to medicine and public welfare.

To create a study group on peace, and on the causes and cure of war.

AMY S. ZUMWALT, *Publicity Chairman.*

MISCELLANY

Under this department are ordinarily grouped: News Items; Letters; Special Articles; Twenty-five Years Ago column; California Board of Medical Examiners; and other columns as occasion may warrant. Items for the News column must be furnished by the fifteenth of the preceding month. For Book Reviews, see index on the front cover, under Miscellany.

NEWS

Coming Meetings

American Heart Association, Kansas City, May 12, 1936. Gertrude P. Wood, 50 West Fiftieth Street, New York, office secretary.

American Medical Association, Kansas City, Missouri, May 11-15, 1936. Olin West, M. D., 535 North Dearborn Street, Chicago, secretary.

American Surgical Association, Chicago, May 7-9, 1936. Vernon C. David, M. D., 59 East Madison Street, Chicago, secretary.

California Medical Association, Coronado, May 25-28, 1936. Frederick C. Warnshuis, M. D., 450 Sutter Street, San Francisco, secretary.

New Mexico Medical Society, Carlsbad, May 6-8, 1936. L. B. Cohenour, M. D., 219 West Central Avenue, Albuquerque, secretary.

Texas State Medical Association, Houston, May 25-28, 1936. Holman Taylor, M. D., 1404 West El Paso Street, Forth Worth, secretary.

Medical Broadcasts*

The American Medical Association broadcasts over WEAF, the Red network instead of the Blue, as formerly, and certain additional stations of the National Broadcasting Company at 5 p. m., eastern standard time (4 p. m. central standard time, 3 p. m. mountain time, 2 p. m. Pacific time), each Tuesday, presenting a dramatized program with incidental music under the general theme of "Medical Emergencies and How They Are Met." The title of the program is "Your Health." The program is recognizable by a musical salutation through which the voice of the announcer offers a toast: "Ladies and Gentlemen, Your Health!" The theme of the program is repeated each week in the opening announcement, which informs the listener that the same medical knowledge and the same doctors that are mobilized for the meeting of grave medical emergencies are available in every community, day and night, for the promotion of the health of the people. Each program will include a brief talk dealing with the central theme of the individual broadcast.

Pacific Network.—The stations on the Pacific network are KGO KPO KFI KGW KOMO KHQ KFSD KTAR.

* * *

San Francisco County Medical Society.—The radio broadcast program for the San Francisco County Medical Society for the month of May is as follows:

Tuesday, May 5—KYA, 6 p. m.
Tuesday, May 12—KYA, 6 p. m.
Tuesday, May 19—KYA, 6 p. m.
Tuesday, May 26—KYA, 6 p. m.

* * *

Los Angeles County Medical Association.—The radio broadcast program for the Los Angeles County Medical Association for the month of May is as follows:

Saturday, May 2—KFI, 9 a. m. Subject: The Road of Health.
Saturday, May 2—KFAC, 10:15 a. m. Subject: Your Doctor and You.
Tuesday, May 5—KECA, 11:15 a. m. Subject: The Road of Health.
Saturday, May 9—KFI, 9 a. m. Subject: The Road of Health.
Saturday, May 9—KFAC, 10:15 a. m. Subject: Your Doctor and You.
Tuesday, May 12—KECA, 11:15 a. m. Subject: The Road of Health.
Saturday, May 16—KFI, 9 a. m. Subject: The Road of Health.
Saturday, May 16—KFAC, 10:15 a. m. Subject: Your Doctor and You.
Tuesday, May 19—KECA, 11:15 a. m. Subject: The Road of Health.
Saturday, May 23—KFI, 9 a. m. Subject: The Road of Health.
Saturday, May 23—KFAC, 10:15 a. m. Subject: Your Doctor and You.
Tuesday, May 26—KECA, 11:15 a. m. Subject: The Road of Health.
Saturday, May 30—KFI, 9 a. m. Subject: The Road of Health.
Saturday, May 30—KFAC, 10:15 a. m. Subject: Your Doctor and You.

* County societies giving medical broadcasts are requested to send information as soon as arranged (stating station, day, date and hour, and subject) to CALIFORNIA AND WESTERN MEDICINE, 450 Sutter Street, San Francisco, for inclusion in this column.

National Hospital Day.—Hospitals throughout the nation are making preparations to observe May 12, the birthday anniversary of Florence Nightingale, as "National Hospital Day." On this day the public is invited to visit accredited hospitals in their respective communities. These hospitals will keep "open house" in all departments and furnish special guides to escort visitors and explain the intricacies and functions of the many technical and scientific appurtenances of the modern hospital.

National Hospital Day was inaugurated May 12, 1920, on the one-hundredth anniversary of the birth of Florence Nightingale, who is regarded as the founder of the nursing profession. The "day" has been observed each year since with the endorsement of the President, governors of states, and mayors of cities. A committee of national scope, appointed each year by the president of the American Hospital Association, promotes the effective celebration of the day. The California members of this committee this year are: Mrs. Lola M. Armstrong, R. N., editor of *Western Hospital Review*, San Francisco; G. W. Olson, assistant superintendent of the Los Angeles County General Hospital, and Mrs. Leonora Warriner, R. N., Glendale Sanitarium and Hospital.

The American Association for the Study and Control of Rheumatic Diseases.—The American Association for the Study and Control of Rheumatic Diseases will hold its fifth conference on rheumatic diseases at the Phillips Hotel, third floor, on May 11 at nine o'clock, in Kansas City.

An educational symposium on the differential diagnosis of diseases of joints follows:

Russell Haden—Clinical grouping and diagnostic approach to the patient with joint conditions.

Edwin P. Jordan—Differential diagnosis of joint diseases from the standpoint of pathology.

Ralph Boots—The essential features in differential diagnosis of atrophic and hypertrophic arthritis.

Joseph L. Miller—Differential diagnosis between Strumpell Marie and osteoarthritis of the spine.

Stafford Warren—Differential diagnostic points of gonorrheal arthritis.

Frank D. Dickson—Differential diagnostic points of tuberculous arthritis, especially tuberculous polyarthritis.

Ralph A. Kinsella—Differential diagnostic points of rheumatic fever.

Philip S. Hench—Differential diagnostic facts about gout, distinguishing it from other joint diseases.

Willis Campbell—Differential diagnosis of traumatic arthritis.

C. H. Slocumb—Differential diagnosis of fibrositis.

William J. Kerr—Differential diagnostic points of constitutional conditions mistaken for arthritis, which produce skeletal aches and pains.

American Heart Association.—The twelfth scientific session of the American Heart Association will be held on Tuesday, May 12, from 9:30 to 5:30 p. m., at the Hotel Phillips, Kansas City, Missouri. The program will be devoted to cardiac insufficiency.

The American Neisserian Medical Society. — The American Neisserian Medical Society will hold its second annual meeting on May 18, in the Hotel Statler, Boston, Massachusetts. All who are interested are cordially invited.

Two Scientists and Inventor to Get Medals and One Thousand Dollars. — Two scientists with records of achievement in the fight against disease, and the inventor of the automobile self-starter, will get John Scott memorial awards of bronze medals and $1,000 each.

The three are: Dr. James Ewing of Memorial Hospital, New York, for his research in classifying tumors, both malignant and benign; George F. Kelly, engineer of New York, for his invention of the dust trap which saves mine and tunnel workers from the perils of silicosis; Charles Franklin Kettering of Dayton, Ohio, vice-president in charge of research of General Motors Corporation, for his invention of the self-starter.

The awards were provided by a bequest of John Scott, Edinburgh chemist, who died in 1816, for the recognition of "ingenious men or women."

New York Polyclinic Medical School and Hospital. At recent meetings of the Clinical Society of the New York Polyclinic Medical School and Hospital, the following program was presented:

"Some Improved Methods in Plastic Reparative Surgery" by J. Eastman Sheehan, M. D. (Illustrated by cinematograph film in natural color.)

"Diagnosis and Treatment of Carcinoma of the Colon and Rectum" by Richard B. Cattell, M. D., of Lahey Clinic, Boston, Massachusetts.

"The Present Status of Endocrine Therapy in Gynecology" by Archibald D. Campbell, M. D., of Montreal, Canada.

"The Genesis and Surgical Treatment of Hypertension" by George W. Crile, M. D., of Cleveland, Ohio.

Dr. Roger Anderson of Seattle, Washington, gave a special afternoon lecture on: (1) "An Anatomic Nonoperative Method of Treating Fractures of Both Bones of the Forearm." (2) "Ambulatory Method of Treating Fractures of the Femur."

Distribution of Milk in Eastern Flood Districts.— A noteworthy contribution to public health during the recent flood emergency was the efficient and often extraordinary maintenance of deliveries of pure milk under the most adverse conditions. Reports from health officials and medical authorities in the flood-stricken regions state that in practically all instances pasteurized fresh milk was delivered to persons while they were still unable to evacuate their homes in the flooded areas.

In the Pittsburgh area milk deliveries were made in power boats, rowboats, canoes, flat boats, and all manner of water craft. All milk was pasteurized, and when lights failed, work in the plants proceeded by candle light, with executives manning equipment along with the plant forces, and office staffs turned into helpers. In spite of the force with which the flood swept into Pittsburgh, the trained distributors of milk met all requirements of state and city boards of health.

In New England airplanes were used to fly spare parts of pasteurization equipment to places out of the flood zone, where milk could be prepared for use of flood victims. In Connecticut the Hartford milk plants were put out of commission by failure of power, but milk plants in unaffected areas pasteurized ample supplies of milk which were taken into Hartford by trucks carrying rowboats, through roundabout ways. In one case trucks had to travel a round trip of 250 miles to get milk to East Hartford by avoiding flood waters, a trip that in normal times is only six miles.

World's Sports Physicians Hold Congress Before Olympic Games. — An international sports physicians' congress will be held by the International Sports Physicians' Association in Berlin from July 27 to August 1, to tie up with the XIth Olympic Games. Twenty-one nations, including the United States, have so far accepted the invitation of the international body, which has appointed the delegates to represent the various countries.

For the United States Dr. John Brown, Jr., of New York, and Dr. R. Tait McKenzie of Philadelphia will participate. The other countries to be represented, besides those whose acceptance is still outstanding, are: Argentine, Belgium, Brazil, Chile, Denmark, England, France, Holland, Italy, Japan, Lithuania, Norway, Austria, Poland, Roumania, Sweden, Switzerland, Czechoslovakia, and Hungary.

Among the subjects to be treated at the congress will be metabolism, circulation, respiration, training, hygiene, psychology, traumatology, medical and recreational gymnastics, constitution, biometrics, sport hygiene and aviation hygiene and biological and social questions.

Social Hygienic Society Elects Dr. Ray Lyman Wilbur as President.—Regretfully accepting the decision of Dr. Edward L. Keyes that for health reasons he must resign after twelve years of leadership, the Nominating Committee counted itself fortunate in persuading Dr. Ray Lyman Wilbur, long a vice-president, to accept the president's chair for 1936. Other officers elected at the annual meeting on January 15 were as follows: Vice-presidents, Professor C.-E. A. Winslow of Connecticut, Dr. Albert J. Chesley of Minnesota, Dr. Elizabeth Campbell of Ohio, and Dr. John H. Musser of Louisiana; secretary, Mrs. Henry D. Dakin; treasurer, Timothy N. Pfeiffer. Members of the Board of Directors elected were: For the term ending December 31, 1936: Miss Florence M. Read, Judge Lawrence B. Dunham. For the term ending December 31, 1938: Mrs. James Lees Laidlaw, Doctors Louis I. Dublin, Donald R. Hooker, Thomas Parran, Jr., William A. White, Livingston Farrand, and William F. Snow.

Commenting on the presidency, the *Journal of Social Hygiene* says: "Doctor Wilbur's election guarantees the continuation of the prestige and influence brought to the organization by its previous chief officers, Charles W. Eliot, Abram W. Harris, Dr. William H. Welch, Dr. Hermann M. Biggs, and Dr. Keyes."

Gas Successfully Replacing Air in Brain Operation. Ethylene gas as a substitute for air in the procedure known as encephalography, or removal of cerebrospinal fluid from the brain and spinal chord, has been developed at the University of California Medical School with marked success in a series of considerably over one hundred patients, it was recently announced by the school's department of surgery. The procedure consists of replacing the fluid with the gas, under carefully controlled conditions, and permits the brain itself to be visualized by x-ray.

In the diagnosis of such conditions as brain tumors, epilepsy, or the aftermath of brain injuries, the method has proved of invaluable assistance. The discomfort and period of hospitalization generally incident to this procedure have been greatly reduced by the new development. The ethylene gas is absorbed and disappears in a few hours, whereas when air was used it remained present several days. The ethylene gas also has a mildly sedative effect in certain cases, and this has further tended to decrease the discomfort.

The introduction of air to displace the cerebrospinal fluid has been a common procedure since 1919 at other medical centers. Various other gases, and also radio-opaque fluids have been repeatedly tried as substitutes for air, but with indifferent results.

Results of the procedure, used in fifty-three cases, were presented to the American College of Surgeons at its meeting here last fall. Since then the gas has been used on considerably more than thrice that number of cases, always with the same satisfactory results.

Doctor Rosenau Goes to North Carolina.—Dr. M. J. Rosenau, recently retired as dean of the Harvard School of Public Health, has been appointed director of a newly organized Department of Public Health in the University of North Carolina School of Medicine at Chapel Hill. This development involves the coördination of the staff and facilities of the North Carolina State Board of Health and the state schools of medicine and engineering.

Doctor Rosenau, one of the foremost authorities in preventive medicine and public health, as a surgeon in the United States Public Health Service was stationed at Angel Island more than thirty years ago, after bubonic plague first appeared in California. Two years ago he gave extended courses in public health administration at the University of California, Berkeley. It is doubtful that any other individual has achieved a more enviable record as an educator in public health, generally, than has Doctor Rosenau.

Sylvatic Plague. — The growing menace of sylvatic plague in the rodent population of California and the West, was made the subject of a special instructional short course conducted by the state university, state and federal experts, as a means of promoting widespread control. The course was under the direction of the Western Branch of the American Public Health Association.

The plague, which has some baffling aspects, and which is a direct menace to public health, has now spread to a number of points throughout the West, and has caused a few human fatalities. The existence of the menace has occasioned the selection of a special committee by the Public Health Association, the head of this committee being Dr. Karl F. Meyer, director of the Hooper Foundation, University of California.

University technicians, executives of the state and federal public health services and representatives of the federal biologic survey and the State Department of Agriculture, who were invited to lecture, included: Dr. Walter M. Dickie, director of the State Department of Public Health; Dr. Wilfred H. Kellogg, director of the State hygienic laboratory; Dr. Tracy I. Storer and Dr. Morris A. Stewart, University of California technicians; Dr. R. B. Parker, Hamilton, Montana, director of the Rocky Mountain laboratory of the United States Public Health Service; W. C. Jacobsen, supervisor of rodent control, State Department of Agriculture; E. E. Horn, United States Biological Survey, and Dr. Chauncy D. Leake, professor of pharmacology, University of California Medical School.

Mental Test for Chronic Speeders.—Persons who are obviously unfit to drive an automobile or who repeatedly and chronically defy or ignore public safety mechanisms and regulations, should be subjected to a mental and physical examination. This is the opinion of Dr. E. W. Twitchell, clinical professor of neuropsychiatry of the University of California Medical School. According to Doctor Twitchell it would not be practicable to subject every driver or prospective driver to such an examination, but it certainly should be done in the case of those who persistently defy necessary driving restrictions and menace the lives and limbs of others.

According to Doctor Twitchell the automobile mortality and accident situation may be expected to become much worse before the people of the country rise up and unitedly demand relief. The number of incompetents now driving cars is constantly on the increase, and it is presumed that this number must increase to the saturation point of human tolerance and endurance before there is a change.

Doctor Twitchell states he has occasionally found it necessary to submit reports to the State Division of Motor Vehicles regarding patients who were obviously unfit to drive. In one instance, he said he obtained cancellation of the license of one insane man who was being permitted to operate his car freely on crowded streets and highways. Another, a taxicab driver in one of the San Mateo peninsula towns, who was suffering from a severe nervous complaint, also came to his attention, and he has warned a number of epileptics and members of their families that these sick persons should not drive an automobile.

American Medical Association Annual Session.—California members appearing on the American Medical Association Program at Kansas City.

W. J. Kerr, chairman of Section on Medicine.
Leon Goldman, San Francisco, Section on Surgery.
Lyle G. McNeile, Los Angeles, Section on Obstetrics and Gynecology.
William B. Thompson, Los Angeles, Section on Obstetrics and Gynecology.
Howard F. West, Los Angeles, Section on Obstetrics and Gynecology.
Warren D. Horner, San Francisco, Section on Ophthalmology.
Otto Barkan, San Francisco, Section on Ophthalmology.
Edward C. Sewall, San Francisco, Section on Nose and Throat.
H. J. Profant, Santa Barbara, Section on Nose and Throat.
Albert W. Snoke, San Francisco, Section on Pediatrics.
Clifford W. Sweet, Oakland, Section on Pediatrics.
Emil Bogen, Olive View, Section on Pediatrics.
M. A. Gifford, Bakersfield, Section on Pediatrics.
Chauncey D. Leake, San Francisco, Section on Pharmacology.
Henry W. Newman, San Francisco, Section on Nervous and Mental.
J. M. Nielsen, Los Angeles, Section on Nervous and Mental.
John B. Doyle, Los Angeles, Section on Orthopedics.
Ellis W. Jones, Los Angeles, Section on Orthopedics.
John C. Wilson, Los Angeles, Section on Orthopedics.
Sylvan L. Haas, San Francisco, Section on Orthopedics.
LeRoy C. Abbott, San Francisco, Section on Orthopedics.
W. H. Kiger, Los Angeles, Section on Proctology.
Wilbur Bailey, Los Angeles, Section on Radiology.

New York City Lowers Five Health Records.—Dr. John L. Rice, commissioner of health, city of New York, has reported to an organization of milk dealers concerning the remarkable achievements of his department in 1935 as follows:

"During 1935 New York City established five new records, the lowest general death rate (based on the estimated population), the lowest infant mortality rate that the city has ever known, the lowest diphtheria rate, the lowest typhoid rate, and the lowest tuberculosis rate. You have been in the milk business long enough to know the relationship between a safe milk supply and the prevalence of typhoid, tuberculosis, and deaths of infants."

American Public Health Association.—Drawn from every state in the Union, from Canada, Cuba and Mexico, officials from the various branches of federal, state, city, and county health departments and other agencies active in disease prevention and health promotion will gather in New Orleans on October 20 to 23 for its sixty-fifth annual meeting.

Dr. Thomas A. Parran, Jr., Surgeon-General of the United States Public Health Service, is president-elect of the Association and will be honored at New Orleans.

National headquarters of the American Public Health Association are 50 West Fiftieth Street, New York, N. Y., and Dr. Reginald M. Atwater is executive secretary.

Accidental Deaths Bring Heavy Losses.—There were 543 accidental deaths recorded in California last November, 295 of which (55 per cent) were due to automobile accidents. There were 138 deaths due to accidents in the home—more than 25 per cent. There were but 75 deaths due to other public accidents (not motor vehicle) and only 31 accidental deaths occurred in the occupational group—less than 6 per cent of the total.

Of the 295 motor-vehicle deaths, 118 were of persons gainfully employed at times of the accidents. Of the total number, 72 were of persons under twenty-five years of age and 223 were of persons twenty-five years of age and over. Eighteen such deaths were among individuals under fifteen years of age.

The Pan-Pacific Surgical Congress: Honolulu, Hawaii.—The forthcoming meeting (August 6 to 14) of this internationally important organization offers a gorgeous vacation prospect for the summer of 1936. Leaving Los Angeles on August 1 (San Francisco, July 31), the United States and Canadian contingent will have five matchless days on the summer Pacific to enjoy themselves without stint, and to consolidate themselves into the American delegation. As a background to a series of brilliant social occasions in honor of visiting international authorities, delegates and their families will enjoy the modern pageantry of ship life at its apex. Pacific luxury liners will offer the attractions of tennis courts, gymnasium, outdoor swimming pool, and a dozen fascinating deck sports, the library or spacious music rooms, while the gay rhythm of the night club, scarcely an octave away, will lure many. Last, but not least, there is the well-renowned culinary magic which emanates from the kitchens of these floating palaces. Even under ordinary circumstannces such a prospect might be considered extraordinarily attractive. Combining it in prospect with frequent informal conferences and round-table discussions, and with constant cordial interchange of scientific opinion and the opportunity to meet and know interesting personalities, the prognosis is excellent to a degree.

With judgment born of true wisdom the Program Committee has allotted five days, the first five days in Honolulu, to the relaxations and enjoyments for which Hawaii is noted. Accommodations will be at the matchless Royal Hawaiian. Everything is available to gladden the heart of the enthusiastic vacationist: The famous beaches for swimming, surf boarding, fishing, tennis, motor trips, a two days' airplane tour of the most beautiful islands in the Pacific, inspection of volcanos, visits to native villages, a night at the famous Mauna-Seaside Hotel, golf at the famous Waialae Club, and a galaxy of brilliant social functions available or not, according to the mood of the voyager. Finally, and most important, the unstinted famous hospitality of our hosts, the physicians of Honolulu. Five days of unmitigated pleasure in a vacation setting second to none in the world!

Little need be said of the scientific sessions beyond the fact that the programs in the various sessions are solid with the names of international authorities. Leaving aside the aspect of international exchange of opinion, this meeting would be identified as outstanding merely by the authoritative names on the program. Considering its potentialities, however, for the adjustment of moot points in international concept, for example, the matter of basic methods of compiling statistics for comparison between nations—the consideration of conservative versus radical measures in the management of medical and surgical conditions as practiced and advocated in different countries. Such matters and a hundred others will most certainly bring out of these scientific sessions not only personal advancement in intellectual concepts, but actual trends of thought of a sort which lead to world-wide scientific advancement. Many physicians or surgeons may well feel privileged to contribute, in however conspicuous a manner, to discussion of such basic potentiality.

Returning, the delegates and their families will have another five days of ship life; another leisurely period in which to relax and digest the mental pablum of the scientific sessions; more opportunities to exchange opinions and to gather loose ends. Returning voyagers will have a day in Los Angeles, arriving in Los Angeles August 20, and may continue to San Francisco the following day, arriving in San Francisco August 22. Inquirers will find, to their surprise, that the total cost of such a trip is scarcely more than a trip to any meeting in the East. There can be little comparison in matter of returns. These sessions are outstandingly attractive from so many angles that the consideration of cost and time involved becomes minimized. Where there is the remotest possibility of completing arrangements eventually, inquiries should be made at once, since the registration and sailing list is mounting rapidly. Information is available elsewhere in this journal.* Dr. George W. Swift at 902 Boren Avenue, Seattle, is president and general chairman of the meeting.

* See adv. page 23.

Degree of Doctor of Medicine (Honorary) Bestowed on Dr. Karl F. Meyer.—On Wednesday evening, April 23, 1936, in the headquarters building of the Los Angeles County Medical Association, the faculty, alumni, and invited guests of the College of Medical Evangelists of Los Angeles met in special convocation to hear an address on the subject, "Neutropic Viruses and Diseases Caused by Them," delivered by Dr. Karl F. Meyer, director of the Hooper Foundation for Medical Research and professor of bacteriology in the University of California. At the conclusion of the guest-speakers' address, Dr. Percy T. Magan, president of the College of Medical Evangelists, spoke of the many medical researches that had been carried on by Professor Meyer in his work at the Hooper Foundation, of the inestimable value these studies had been to medicine in general and to California physicians in particular; stating that because of this service to the State's citizens and medical profession, the trustees and faculty construed it an honor to bestow upon Professor Meyer the degree of Doctor of Medicine, honorary. Dr. Howard Morrow, president of the California State Board of Health and professor of dermatology in the University of California, was called on and he also told of the place Doctor Meyer had made for himself since coming to California, expressing the thought that since Doctor Meyer was so constantly called in consultation by California physicians to aid in solving obscure problems in medicine, the degree granted by the College was most worthily bestowed, and a proper addition to the other degrees that had been earned by the recipient. Dr. Edward M. Pallette, president-elect of the California Medical Association, followed with thoughts in similar vein, mentioning also that practically all the public health regulations of California, dealing with the important canning industry of the State, had been largely elaborated by Doctor Meyer, and so efficiently that the material returns to California citizens therefrom could be estimated only in income returns of hundreds of thousands of dollars annually. The convocation was preceded by a dinner, Dr. Benton N. Culver acting as toastmaster, and Professor Meyer being introduced by Dr. Wilton L. Halverson, health officer of Pasadena.

Committee for the Study of Suicide.—An organization to be known as the Committee for the Study of Suicide, Inc., was incorporated last December under the laws of the State of New York and began its activities early in January.

The committee plans to undertake a comprehensive study of suicide as a social and psychologic phenomenon. To achieve this the following general outline was adopted.

1. *Intramural studies* of individuals inclined to suicide in selected hospitals for mental diseases.

2. *Extramural studies* of ambulatory cases afflicted with suicidal trends or with obsessional wishes for their own death.

3. *Social studies* of suicide will be undertaken along the following general lines. Various attempts at suicide will be followed up by experienced psychiatric social workers; all cases will be studied from the standpoint of social background and history and those who failed in their attempts or have recovered from injuries following a partially successful attempt (prolonged unconsciousness or physical illness) will be urged to submit to psychiatric and psycho-analytic treatment in the hands of the intra- or extramural therapeutic agencies which will be available to the committee.

4. *Ethnologic studies*, that is, comprehensive investigation of suicide among primitive races, will be one of the first concerns of the committee, for suicide is a rather frequent occurrence among many primitive races still extant and when studied may throw some light on suicide as a phychobiologic phenomenon.

5. *Historical studies* of suicide will be pursued systematically under the auspices of the committee, so as to make available a scientific history of the phenomenon as a social and medico-psychologic problem.

The committee was organized under the guidance of its first chairman, the late Dr. Mortimer Williams Raynor,

medical director of Bloomingdale Hospital, who died on October 5, 1935.

Dr. Henry E. Sigerist, professor of the history of medicine at Johns Hopkins University, and Dr. Edward Sapir, professor of anthropology at Yale University, are consultant members of the committee. They will advise and guide in that part of the work which touches their respective fields.

The executive offices of the committee are located at Room 1404, the Medical Arts Center, 57 West Fifty-Seventh Street, New York City, and will be in charge of an executive assistant.

Bacillus He Defeated Is Fatal to Doctor.—In every country of the world today there are men, women and children alive because forty-five years ago an earnest young physician and a grizzled medical educator risked horrible deaths to identify and give battle to a tiny bacillus that had been killing men since time immemorial.

The young physician and his teacher won a fight against the germ and both were honored throughout the world.

Ten billion bacilli might have laughed today, for on April 13 the earnest young physician died, at sixty-five, of gas gangrene, the revolting disease that he fought and whipped forty-five years ago.

He was Dr. Harlow Brooks of New York, one of the foremost diagnostic physicians of the United States. His collaborator of the nineties, Dr. William H. Welch, died several years ago. And even the laboratory assistant who aided them was made a widow by the same bacilli, for she became Mrs. Harlow Brooks in 1899.

The germs that caused Doctor Brooks' death are known as Welch's bacilli, in honor of the senior of their discoveries. They normally are present in the majority of human bodies, but become potent only in a condition of bodily debility. Doctor Brooks had been ill of grippe and a liver infection.

The gas gangrene that caused his death is so called because the bacilli that cause it produce great quantities of gas inside the body. Before he and Doctor Welch isolated the germ, it always was fatal. It still is one of the most dangerous of the ills of mankind.

Federal Food and Drug Administration Reports.—The following patent medicines were recently seized on charges of bearing false and fraudulent curative claims for the conditions named: "Bi-Sarcol," a solution of vegetable laxatives, licorice, baking soda and other salts in water, for toning the stomach and kidneys, for run-down conditions, and for enriching the blood; "Clark's Famous Liquid Formula No. 6," consisting of kamala, mineral oil, carbon tetrachlorid, turpentine, sassafras and water, for worms in poultry, hogs, dogs, rabbits, and cats; "Diaplex," a dried herb mixture for diabetes; "Gowan's Preparation," a salve containing wintergreen, camphor, eucalyptol, menthol, turpentine and carbolic acid, for pleurisy, spasmodic croup, coughs, congestion, inflammation, and pneumonia; "Kompo Bile Salts Tablets," a red-coated pill containing bile salts, phenolphthalein and small amounts of calcium, magnesium, iron and aluminum salts, for liver and kidney ailments, gall-stones, heart trouble, hardening of the arteries, neuritis, rheumatism, neurasthenia, insomnia, ulcers, and cancer; "Lur-Eye," a petrolatum salve containing principally wintergreen oil and thymol, for tired, bloodshot, or inflamed eyes, and granulated lids; "Pfeiffer's Sore Throat Remedy," a solution of ammonium chlorid, potassium chlorate, sodium benzoate and wintergreen in water and glycerin, for sore throat, tonsillitis, hoarseness, thrush, and ulcerated sore mouth; five "Vegetrate" preparations (called A-44, A-45, A-410, A-417, and BFI), consisting of varying proportions of dried materials, such as garlic, onions, lettuce, parsley, endive, beet tops, spinach, cinnamon, cranberries, seaweed, rhubarb root and calcium carbonate, for hay fever, asthma, diabetes, hypertension, hyperacidity, and other conditions; "G. B. Williams Pills," containing mercury and antimony compounds, laxatives and an alkaloidal drug, for biliousness and liver disorders; two shipments of witch-hazel, one labeled as a treatment for wounds, painful swellings, lame back, piles, sore throat, neuralgia and rheumatism (the article in this instance was also short volume), and the other for rheumatism and piles; and six ointments and liniments sold at auction, bearing claims for inflammation, congestion, asthma, bronchitis, catarrh, chest colds, sore throat, croup, boils, and pains (Adams Vapor Ointment); for cuts and for healing (Adams Menthol Salve); for nervous headaches, muscular rheumatism and nasal catarrh (Adams Menthol Jelly); for muscular rheumatism, lumbago, stiff neck, neuralgic headache, sciatica, muscular cramp, bronchial cough, spasmodic croup, and acute pleurisy (Adams Painon Liniment); the remaining two being in violation of the Federal Caustic Poison Act.

"Farastan Mono-Iodo-Cinchophen Compound" was also seized because the name was held to be false and misleading, since the article consisted almost entirely of cinchophen (97 per cent).

Unusual Operation by the Late Dr. Saxton T. Pope Is Brought to Light.—Details of an unusual operation performed by the late Dr. Saxton T. Pope, staff member of the University of California Medical School and former and beloved secretary of the California Medical Association, have just come to light in an article by Isabelle Armstrong, published in the current issue of the Alumni Bulletin of the school.

The article states that while conducting a lecture some years ago, Doctor Pope saw a woman fall from the third story of a building across the street. Excusing himself, he went to her assistance. Some time later he returned with the announcement that he had performed a cesarean operation on the woman, who had been killed in the fall, and had brought forth a living baby.

Doctor Pope was characteristically non-committal regarding the occurrence, but it developed later that the woman had hurled herself from the window for some unknown reason. Seeing that he could not save her, Doctor Pope immediately devoted his attention to the baby, effecting a safe delivery on the spot.

The great versatility of Doctor Pope as a man, as well as his skill as a surgeon are touched upon in the article. He was an accomplished musician, and he also received wide attention as an expert with the bow and arrow. Ishi, the aborigine, who was a charge of the University while a study was being made of his tribe, of which he was the last surviving member, was a friend and companion of Doctor Pope.

LETTERS

Concerning dinitrophenol as a cause of cataracts: Its use dangerous.

April 21, 1936.

To the Editor:—Commenting on Doctor Rodin's excellent article on dinitrophenol cataract in the April issue (page 276) of CALIFORNIA AND WESTERN MEDICINE, I wish to state that the list of cases which I have assembled in Southern California has been enlarged since I wrote my discussion for his paper.

I now have a list of twenty-three cases in this section upon which I have complete statistics and checked against duplication. I have sixteen cases from reports in the literature, only three of which occurred in California and, in addition, verbal reports of twenty-two cases from physicians in various parts of this State. Combining these with the thirty-two cases in Rodin's series would make a total of eighty known cases in California. The most disconcerting feature about the recent cases is that they occurred many months after discontinuance of the drug. seventeen proprietary preparations contain this drug, and

In a communication from Doctor Geiger, health officer of San Francisco, I am informed that approximately seventeen proprietary preparations contain this drug, and I

understand from Doctor Hosford that the Health Department of San Francisco has taken steps to prohibit the sale of dinitrophenol to the laity. Similar measures of a more inclusive nature should be taken to restrict the sale of this drug in the State.

I have been informed of physicians who are still prescribing dinitrophenol. Of course, any physician who prescribes it from now on is inviting upon himself not only severe criticism, but medico-legal retribution as well.

Sincerely yours,

HAROLD F. WHALMAN, M. D.

Concerning thanks to Governor Frank F. Merriam (March issue, page 146).

STATE OF CALIFORNIA
DEPARTMENT OF
PROFESSIONAL AND VOCATIONAL STANDARDS
SACRAMENTO

April 9, 1936.

Dr. George H. Kress
Los Angeles, California

Dear Doctor:

Thanks for your thoughtfulness in sending me the March copy of CALIFORNIA AND WESTERN MEDICINE. I personally showed the article to the Governor, who read it and asked me to express to you his appreciation.

With best wishes, I am

Fraternally yours,

WILLIAM G. BONELLI, *Director.*

Concerning California Medical Association cards sent out with membership cards.

Santa Ana, March 30, 1936.

To the Secretary: — Thanks for your new card for framing along with membership card. It is a capital idea!

I explain it to my patients this way: That there is a usual flat charge, depending on service given, but we give reductions from this for people whom we feel can't afford the regular fee. This disabuses their mind of the idea that we charge exorbitantly if we feel they have means.

Sincerely yours,

WILLIS P. BAKER.

201 East Seventh Street.

SPECIAL ARTICLES

GROUP HOSPITALIZATION ON A PERIODIC PAYMENT METHOD: ALAMEDA COUNTY PLAN*

The Committee on the Cost of Medical Care has determined very definitely that it is not the high cost of staying in the hospital that burdens, but the unevenness of sickness that causes a strain on society for hospital and medical care and creates most of the present financial health problems.

Plan Is Not New.—Hospitalization on a periodic payment plan is not new. We have in this vicinity some of the earliest plans started in the United States, namely, the French and German hospitals of San Francisco. In 1930 the Baylor University Hospital of Dallas, Texas, started an experiment to apply hospitalization to gainfully employed groups on a payroll deduction at actual cost of hospital care for respective groups. In 1932 the Superior California Hospital Association of Sacramento, California, enlarged upon this plan by including all hospitals of the community and adjacent territory in such a plan. Today there are in operation in the large centers of population of the United States over seventy such organizations. The Association of Hospital Service of New York, in operation nine months, has 60,000 members with 174 hospitals participating.

The 1932 Mandate of the Alameda County Association.—In 1932 the Alameda County Medical Association gave a mandate to a committee to develop a plan for hospitalization on a periodic payment basis. This committee developed a plan in conjunction with the accredited hospitals. At a special meeting, held in August, 1933, the Alameda County Medical Association approved the plan submitted by the committee. Upon the advice of the committee's attorney, Mr. Hartley Peart, the launching of the plan was withheld until a definite ruling was obtained from the Insurance Commissioner, determining whether such a plan was insurance would come within the province of the insurance law. The Attorney-General's opinion of January, 1934, stated that the plan was insurance and that to operate such a plan it would be necessary to deposit $25,000 to guarantee the performance of the contract.

Economic conditions at that time had not improved materially and it was not thought advisable to solicit funds to accumulate such an amount necessary to launch the work.

Assembly Bill 246: 1935 California Legislature.—The hospitals of Alameda County, in coöperation with other voluntary hospitals of the State of California, after much consideration prepared a bill which was introduced in the legislature in January, 1935. This bill was officially known as Assembly Bill 246, and provided for hospital care by nonprofit corporations to sell this service to the public under the jurisdiction of the Insurance Commissioner without posting the required deposit required by the Insurance Act of the State of California. After some difficulty, with amendment added, the bill was finally passed by both Assembly and Senate, signed by the Governor, and became a law on September 15, 1935.

However, after careful consideration and study, the committee has decided that it would be impossible to launch this plan under the limited provisions of Assembly Bill 246 because lay organizations and insurance companies will sell complete hospital service, offering competition which cannot be met.

Greater Advantages of a Mutual, Nonprofit Organization.—The Superior California Hospital Association of Sacramento, spoken of earlier, has now posted the required amount of money and has changed its type of organization to a mutual, nonprofit association coming under the jurisdiction of the Insurance Commissioner of this State. This organization has already attempted to enter this territory and has contacted the hospitals for care of their patients so that they might sell their policies in this community. The contract offered, in the opinion of your committee, is undesirable in many respects and, after further deliberation, they have reached this conclusion: The plan should be controlled by the Alameda County Medical Association and the accredited hospitals in this community.

What the Present Alameda County Plan Aims to Accomplish.—A plan so controlled will permit:

1. Free choice of doctor and will in no way disturb the present relationship between the doctor and the patient.
2. Free choice of hospital.
3. Conserve patient's resources for payment of doctor's bills.
4. Pay the hospital bill.
5. Hold off health insurance and state medicine.

In accordance with the provisions of the policy that your committee has drawn up, the corporation shall furnish its beneficiary members in time of illness, ailment or injury with twenty-one days' hospitalization, which shall include the following hospital service:

(*a*) Board and room—ward accommodations.
(*b*) General nursing.
(*c*) Operating room.
(*d*) Operating room service.

* The attention of members of the California Medical Association is called to this article, and particularly to the fact that a sufficient number of physicians in Alameda County have subscribed to a $25,000 fund, which the laws of California demand shall be existent before insurance coverage can be sold.

(*e*) Drugs, with the exception of serums, vaccines, spiritous liquors, and expensive proprietary drugs.

(*f*) Dressings.

(*g*) Physiotherapy treatments.

(*h*) The contract will indemnify the patient to pay the pathologist for ordinary clinical laboratory service.

(*i*) Indemnify the patient to pay the roentgenologist for the following services:

1. In cases of accidental bodily injuries, all such services necessarily incident or required, exclusive of therapy, in the opinion of the attending physician, for the relief and treatment of the beneficiary while a registered hospital bed patient.

2. In cases of bodily illness or disease only when necessary to assist in diagnosis during hospitalization, and expressly excluding all therapy and any diagnostic services which could have been performed prior to admission to the hospital.

This contract in no way disturbs the relationship between the pathologist, roentgenologist, and the hospital.

When Does This Hospitalization Service Become Effective to Policyholders?—Service is effective after becoming a member as follows:

1. Accidental injury—one day later.

2. For sickness or ailments contracted or having their first signs or symptoms more than seven days later.

3. For illnesses or ailments requiring major or minor operation that are contracted or having their first signs or symptoms more than fifteen days later, except in the case of a hernioplasty, tonsillectomy, or adenoidectomy, which shall be twelve months.

Diseases and Injuries Not Included.—Services not provided for are: Tuberculosis, cancer, venereal infection, mental or nervous disorders, industrial accidents, alcoholism, drug addiction, rest cure, intentional self-inflicted injuries (sane or insane), normal pregnancy including cesarean, abortions, diseases directly or indirectly due to war.

Other Conditions of the Hospitalization Policy.—No medical examination is required, but hospitalization of any beneficiary member must be by recommendation by a legally qualified doctor of medicine only, whose credentials would be recognized by hospitals accredited by the American College of Surgeons.

In cases of bona fide accident or injury or sudden illness, members in good standing in the corporation while absent from their usual residence will be provided hospitalization in any licensed hospital in the United States or Canada for a period not to exceed fourteen days.

Age limits: Members of a gainfully employed group between the ages of eighteen and sixty-five, unless the age limit has been specifically waived by the Board of Directors.

Dues: One dollar per month. (Discounts may be given to large groups.)

Plan of the Holding Organization.—This plan is feasible and financially sound. It will be operated and controlled by a Board of Directors, consisting of representatives of the Alameda County Medical Association and representatives of the accredited hospitals holding contracts.

* * *

Note.—Following the above statement to members of the Alameda County Medical Association, who were invited to attend an organization meeting, the names of members of the staffs of the accredited hospitals of the county were given to committees for request for coöperation by payment of a $100 subscription. In one week 150 members had deposited their checks for $100 each. The $25,000 fund required by the Insurance Commissioner of California is assured, and as soon as deposited the campaign for the sale of hospital contracts will be started. It now seems probable that employees in groups will take contracts to the number of 5,000 or more, and it is believed that 20,000 contracts will be sold within the year.

Thus, the entire Alameda County plan as recommended by Dr. George Reinle in his presidential address at Riverside has been carried out, and the principles as recommended by the Public Relations Department and endorsed by the House of Delegates at Del Monte have been made to come into being in at least one county in California. The entire project is under the joint control of the Alameda County Medical Association and accredited hospitals in Oakland and other Alameda County communities.*

NEW YORK CITY'S GROUP HOSPITALIZATION PLAN

From the *Hospital Service News*, official bulletin of the Associated Hospital Service of New York, 370 Lexington Avenue (at Forty-first Street), New York, N. Y., in its March 31 issue, the following excerpts are printed. The plan has many features in common with the Alameda County plan.

* * *

Three-Cents-a-Day Plan Sets World Record

Surpasses London in Ten Months

New York's new three-cents-a-day plan for hospital care has established a world's record by enrolling in a little over ten months more subscribers than the London Hospital Saving Association enrolled in its first year.

More than 66,000 are in good standing in the New York plan, according to Frank Van Dyk, executive director of the Associated Hospital Service of New York.

The London plan had 62,500 subscribers at the end of its first year. At the end of fourteen years, the London plan now has more than a million and a half enrolled.

The New York plan is operated on a nonprofit, noncharity basis. Subscribers receive complete hospitalization for twenty-one days in semi-private accommodations in any one of 174 hospitals in return for subscriptions at the rate of three cents a day.

The English and American plans both have the same object of enabling men and women in receipt of regular wages or income to save for the hospitals while in health, and to pool their savings so that they may collectively reimburse the hospitals for services rendered, thus relieving subscribers from hospital expense at a time when they can least afford it.

Mr. Van Dyk explained that, unlike the London plan, which involves some charitable assistance for subscribers, the New York plan pays the full cost of semi-private hospital care.

The steady increase in enrollment momentum is shown in the following table, which gives the number of subscribers at the end of each quarter:

First quarter	13,511
Second quarter	29,422
Third quarter	50,200
Fourth quarter (to date)	66,095

The first year of operation for the New York plan will not be completed officially until May.

* * *

Comments on Plan Are Gathered From Doctors in New York Area

Many Physicians Give Approval

Physicians and surgeons in the New York metropolitan area who have hospitalized patients who are members of

* The information for this report has been submitted by Dr. Charles A. Dukes, chairman of the Committee on Public Relations of the California Medical Association.

the three-cents-a-day plan were asked for comments upon the plan. Typical of the replies, all of which are filed at Associated Hospital Service headquarters, are the following:

Helped School Teacher

"I had occasion to take advantage of the hospital plan when I operated on a school teacher. From his point of view he was very well satisfied, as he saved the hospital bill. From my point of view there was no difference in the service that he received and in that given a private patient."—S. D. H.

Important Contribution

"I was completely satisfied with the way in which the Hospital Service Plan worked out in a recent case of mine.

"I believe that the plan is providing a very important contribution to the solution of the problem of the cost of medical care to the public and should help the hospitals and medical profession as well."—S. I.

Excellent System

"I do not hesitate to recommend membership in Associated Hospital Service to any of my patients and think that it is an excellent system."—W. F. A.

Helps Small Income Group

"I am very anxious to organize a group which will include myself to become members of your insurance plan.

"My experience with your plan has been a very delightful one. I was the first attending physician to send one of your insured cases to a Brooklyn hospital. The plan enabled Mr. W. to be operated upon without any mental hazards as to how much his hospital expense would be. In addition, his wife was expecting a baby and his income was a limited one, so that I feel that your plan was certainly of the greatest aid in Mr. W.'s excellent convalescence."—M. K. E.

* * *

Medicine Speaks

The *New York State Journal of Medicine* printed the following editorial in its December 1 issue. It will be interesting to many of our members who wonder what organized medicine thinks of New York's three-cents-a-day plan for hospital care:

Progress at Three Cents a Day

"A number of practitioners who have had experience with the group hospitalization insurance offered by the Associated Hospital Service have expressed their satisfaction with the workings of this plan. Patients who might otherwise be compelled to defer treatment are able to enter a hospital when necessary without applying for charity or contracting debts. The physician is more often and more promptly paid because available funds are not eaten up by institutional charges.

"Naturally, there can be no claims of perfection for so new a system. Some roentgenologists, for example, fear that the inclusion of 'ordinary roentgenograms' in the insurance agreement may result in exploitation of their services. Offsetting this possibility is the fact that organized medicine is represented on the voting board of the Associated Hospital Service, and the latter may terminate its contract, after thirty days' notice, with any hospital guilty of a breach of good faith. No institution with any foresight will sacrifice a source of regular income for an occasional illicit profit at the expense of its medical staff.

"Cities which have not yet inaugurated group hospitalization services are in a position to benefit by the experience of Greater New York and other communities in which such plans have been in operation for various periods of time. Provision for hospitalization nullifies one of the principal arguments for obligatory prepayment for sickness by writing off the item which is most likely to overwhelm middle- and working-class patients. Unlike compulsory health insurance, group hospitalization does not interpose a lay bureaucracy between doctor and patient nor disturb the relationship of the profession to the public in any way. It neither raises taxes nor lowers income to any material extent. This is constructive reform, designed to encourage individual independence rather than create a class of perpetual dependents on the state."

* * *

Questions and Answers

Q. *"Does the payment of three cents a day cover all medical treatment or exclusively hospital service?"*

A. Hospital service only. You have your own doctor or surgeon whom you pay direct.

Q. *"Can I go to a hospital for an examination?"*

A. No. The hospitals do not want to compete with practicing physicians. Therefore, the plan is restricted to bed patients.

HALL OF MEDICAL SCIENCE—SAN DIEGO EXPOSITION

By Lyell C. Kinney
Chairman of the Committee

Rated as one of the two outstanding exhibits at the California Pacific International Exposition, the Hall of Medical Science, with its 22,000 square feet of floor space, houses an unusual array of displays showing what the medical profession is doing in the treatment of disease

Fig. 1.—The Hall of Medical Science at the San Diego International Exposition.

and its prevention. It is the result of three months' intensive effort on the part of the committee, composed of representatives of the California Medical Association, and the San Diego County Medical Society.

Over thirty societies and organizations have contributed material. The extensive fifteen-unit display, owned by the California Medical Association, is housed in a large room by itself. In the main body of the Hall are exhibits brought from the East, Middle West, and the Pacific

Fig. 2.—One of the angles in the exhibit of the American Medical Association.

Fig. 3.—A corner of the Human Pathology exhibit.

Coast. The American Medical Association is represented by an educational display, covering over a thousand square feet. Grouped around it, and extending throughout the entire length of the building, are to be found vivid portrayals of what the medical profession is doing in the care of the crippled child, the prevention of infectious disease, the lowering of maternal mortality. The plastic surgeon and the orthodontist show what they can do in the rebuilding of human deformity.

An exceptionally complete series of embryos and fetuses, beginning with a three-millimeter specimen, is attracting

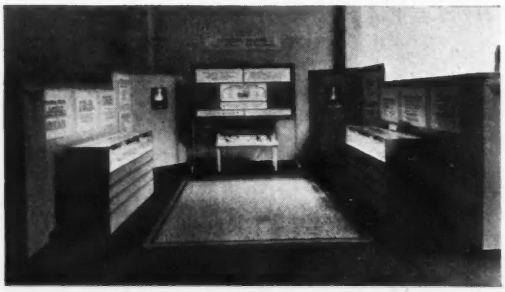


Fig. 4.—Alcove of the Maternal Welfare exhibit.

a great deal of attention. It is rivaled only by the group of one hundred pathologic specimens, well-lighted and clearly labeled. In connection with them, one sees what the bronchoscopist recovers from the lungs of the unfortunate, and how he does it.

Two other special features that are drawing a great deal of attention are the "surgeries" and the x-ray exhibit. Side by side are representations, life-size, of an operation as performed in 1882, and a modern "stream-lined" operating room with all its modern equipment. A 250 K. V. treatment machine, with a complete set of Coolidge tubes,

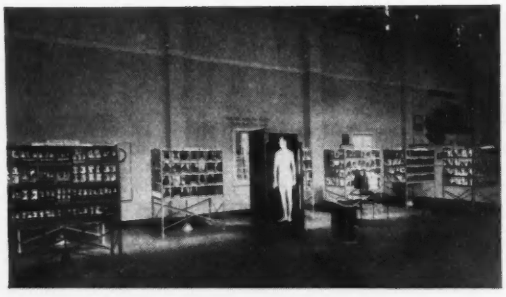


Fig. 5.—Exhibit of the Chicago Roentgen Society and the Pacific Roentgen Club.

Fig. 6.—Exhibit booth of the American Society for the Control of Cancer.

together with over five hundred transparencies (representing, all told, an investment of over $80,000), completes the picture.

The Exposition management has given the committee an auditorium, in connection with the Hall, seating about five hundred. Moving pictures are being shown daily for the instruction of the public. A series of talks on medical topics is being prepared for the summer season, together with seminars on related subjects. Every opportunity is being utilized to present to the layman ethical scientific medicine and its achievements.

PHYSICIANS CORPS FORMED AS FORESTRY AID

Volunteer Doctors' Group Pledges Services in Emergencies

By CHARLES G. DUNWOODY

For many years the California State Chamber of Commerce, believing that California's forests and their protection represented an important economic problem in the future progress of the State, has endeavored through its leadership to interest the citizens of California in actively supporting the official agencies charged with forest protection to the extent that these forests may be wisely used and losses from fire, insects and disease be kept to a minimum.

As a result of this activity, literally thousands of people normally engaged in private occupations each year devote a considerable amount of time and travel at their own expense in the interest of forest protection.

The majority of these good citizens devote their energies toward the securing of adequate forest protection laws and regulations that will assure permanent and more satisfactory conditions within the boundaries of our great forests.

A few direct their energies toward physical forest protection work. The medical profession, not to be outdone by other groups, has recently entered the field of forest protection through the formation of the California Forestry Medical Corps.

This unique organization is the first of its kind to be organized in any country. It is sponsored by the California Medical Association and the California State Chamber of Commerce and at present has within its membership 485 outstanding physicians and surgeons.

It was formed for the purpose of providing organized and efficient medical service at all going forest fires. It functions when asked to do so by any representative of the State Division of Forestry, United States Forest Service, or a county fire warden. Its value has already been demonstrated during the past fire season.

On the recent Malibu fire in Southern California the corps performed its duties with precision and efficiency, and proved itself an indispensable adjunct in the case of a major forest conflagration.

Twenty-four-hour medical service was maintained on this fire, with eighty-two medical officers of the corps

actively participating. Twenty-two hundred cases of injuries to fire fighters were successfully treated.

This service was rendered without cost to the individual treated or the governmental agencies in charge of the fire. Each doctor furnished his own transportation, medical equipment, and his time as his contribution to forest protection.

On another fire during the past season a medical officer of the corps was notified of an injury occurring on a mountain at around a 7000-foot elevation. He immediately borrowed a pair of heavy shoes, climbed the mountain and found a man with a broken spine.

Carrying the patient down the mountainside, the doctor placed him in a corps ambulance and sent him to the hospital, after giving him such treatment as was possible in the field.

The corps serves as a unit of the Conservation Department of the State Chamber of Commerce. It is headed by E. W. Murphy of Los Angeles, chairman of the statewide Conservation Committee.

Under Mr. Murphy's direction are a chief medical officer, an executive officer, six regional medical officers, fifty-eight county medical officers, and three hundred and ninety local medical officers and thirty liaison officers.

In addition to the above the corps has sixty-five registered nurses and thirteen ambulance units in its service.

Each medical officer is assigned to a specific district and signs an agreement to the effect that upon request of a forest officer he will proceed to the scene of a fire and give first-aid treatment to injured fire fighters, remaining on the job until properly relieved.

A dispatching system has been set up whereby in case of a major conflagration doctors are sent to all five camps and relieved when necessary.

A complete staff of liaison officers is maintained and during a major conflagration they patrol the region, making sure that the doctors are supplied with proper medicines and other necessary equipment. They also keep the county medical officer or his dispatcher informed of activities and needs in the field, arranging for relief doctors, etc.

The corps has one rescue unit of non-medical men who are trained in fire rescue work. The ambulance units are furnished to the corps for the most part by county hospitals equipped for this work.

The American Red Cross has fully coöperated with the corps, and where both organizations have been on duty at a fire has given splendid coöperation, working shoulder to shoulder with the medical officers.

During the winter months of low fire hazard, the medical officers conduct schools of first aid for forest officers. They also advise the forest officers as to the proper standardized equipment to be kept in their regular first-aid kits.

The corps is also available for duty in connection with any major public disaster, such as serious earthquakes.

The corps, in addition to being of great value on forest fire duty, has perhaps one of the greatest possibilities possessed by any individual group for educating the public concerning forest problems.

It would be difficult to estimate the number of people that would be reached through one forest fact imparted to a patient by a doctor, but if it went no further than the patient himself, the value of the corps in helping make the public more forest protection minded would be tremendous.

Membership in the corps has been limited to five hundred. To qualify for membership a doctor must be passed upon and receive the approval of the California Medical Association. This procedure assures the corps of a personnel composed of only doctors of high standing in the profession. Already other western forested states are planning to organize similar groups.

California can well be proud of this unique and original contribution to forest protection that is being given without thought of personal gain by the members of the medical profession.

MORTALITY FROM CERTAIN DISEASES AMONG CHILDREN UNDER FIFTEEN YEARS OF AGE IN CALIFORNIA 1906–1934*

By WALTER M. DICKIE, M.D.
San Francisco

PART I

During the time that the California State Department of Public Health has been keeping statistics on deaths from the various communicable diseases, there have been reductions in rates among most of them.

As these communicable diseases affect children under the age of fifteen to a large extent, a special study of these reductions has been made by the Division of Vital Statistics, with interesting results. For these studies the period from birth to fifteen years of age has been divided into three groups: (1) under one year of age; (2) from one to four years of age; and (3) from five to fourteen years of age. The rates are based on the estimates of population for each age group, and the rates are computed per 100,000 population in each age group. The twenty-nine-year period studied has been divided into one four-year and five five-year periods for ease in computation. These periods are 1906-1909 (four years), 1910-1914, 1915-1919, 1920-1924, 1925-1929, and 1930-1934. A comparison of the rates in each five-year-period is given for each disease studied.

TYPHOID FEVER

Age group under 1. In the period 1906-1909 this group shows ten deaths, with a death rate of 6.8 per 100,000 estimated population. This rises to 7.4 in the five-year period 1910-1914, and then steadily declines until in 1930-1934 there is a death rate of 1.2 per 100,000 estimated population of this age group.

In age group 1-4, the death rate initially is much higher than in the age group under one year. This decreased in each subsequent five-year period, the greatest decrease coming between the second and third periods, until in 1930-1934 the death rate for this group is 0.9 deaths per 100,000 population of the age group. The actual number of deaths in this group falls from 102 during the first four years of the study to sixteen during the last five years.

The progress in the age group 5-14 years has been similar to that in age group 1-4, but not nearly so marked. Beginning with 246 deaths during the first four years, the number of deaths for the last five years of the study is reduced to eighty-five, with a corresponding reduction in death rates for the group from 18.6 per 100,000 population to 1.8 deaths from typhoid per 100,000 population.

Details of these changes are shown in the accompanying table.

Deaths from Typhoid Fever by Age Groups, California, 1906-1934

Years	Under 1 yr.		1-4 years		5-14 years	
	Number	Rate	Number	Rate	Number	Rate
1906-1909	10	6.8	102	18.1	246	18.6
1910-1914	16	7.4	117	13.8	246	12.3
1915-1919	8	3.1	44	4.3	139	5.7
1920-1924	9	3.0	54	4.4	129	4.1
1925-1929	5	1.4	17	1.1	80	2.0
1930-1934	5	1.2	0.6	0.9	85	1.8

MALARIA

The occurrence of deaths from malaria, as from typhoid fever, has been greatly reduced in this State in all the age groups studied. Especially is this so in the age group under one, where it is reduced from a rate of 19.7 per 100,000 estimated children under one in the quadrennium 1906-1909 to 0.8 per 100,000 in the years 1930-1934. Numbers have been reduced from twenty-nine in the earlier period to three during the last five years studied.

A similar picture is presented by ages 1-4, where the rate has been reduced from 3.9 in the earlier years to zero in the last five years. Numbers fall from twenty-two in 1906-1909 to zero in 1930-1934.

The reduction in age group 5-14 has not been so marked; beginning with a total of twenty-one cases and a rate of 1.6 per 100,000 population of this age group in

* From the office of the Director, California State Department of Public Health.

Deaths from Malaria by Age Groups, California, 1906-1934

Years	Under 1 yr. Number	Under 1 yr. Rate	1-4 years Number	1-4 years Rate	5-14 years Number	5-14 years Rate
1906-1909	29	19.7	22	3.9	21	1.6
1910-1914	40	18.4	42	5.0	38	1.9
1915-1919	22	8.7	28	2.7	16	0.6
1920-1924	15	5.0	12	1.0	12	0.4
1925-1929	4	1.1	10	0.7	2	0.05
1930-1934	3	0.8	....	....	4	0.1

1906-1909, it rises slightly during the next five years to thirty-eight, or a rate of 1.9, and then falls rapidly to four deaths in 1930-1934, giving a rate of 0.1 per 100,000 estimated population. Details of these changes are shown in the above table.

SMALLPOX

This disease has never been responsible for many deaths in California, particularly among the younger age groups, and although we find a great deal of variation, in general, the rate has fallen somewhat. In the three age groups under study, the one comprising children under one shows the highest mortality rates. With seven deaths in the period 1906-1909 we find a death rate of 4.8 from smallpox. This falls to zero during the next five-year period, then rises to 5.0 and gradually recedes to 0.8 during the last five years.

In the age group 1-4 the rate is nearly uniform over the entire period preceding 1929, but in the last five years it falls to 0.1 from 1.0 per 100,000 group population, during the preceding five years.

In actual number of deaths there is a change from four during 1906-1909 to a maximum of fifteen during the five-year period of 1925-1929, falling to two during the last five years.

The death rates in the 5-14 age group are fairly uniform over the whole period, rising to a high point of 0.4 per 100,000 estimated group population with eleven deaths during 1920-1924, then falling to 0.1 with one death in the last five years of the study.

Smallpox, California, 1906-1934

Years	Under 1 yr. Number	Under 1 yr. Rate	1-4 years Number	1-4 years Rate	5-14 years Number	5-14 years Rate
1906-1909	7	4.8	4	0.7	....	....
1910-1914	....	....	6	0.7	4	0.2
1915-1919	2	0.8	7	0.7	5	0.2
1920-1924	15	5.0	11	0.9	11	0.4
1925-1929	15	4.3	15	1.0	9	0.2
1930-1934	3	0.8	2	0.1	1	0.1

SCARLET FEVER

The general tendency in mortality from scarlet fever has been downward throughout the period of study, although, like measles, there is a rise in number of deaths and rates in all three age groups studied during the period 1920-1924. The rates fluctuate somewhat in all these groups, but in general they show a downward tendency.

The age group under 1 shows a lower death rate than is shown by either of the older age groups. Beginning with fourteen deaths and a rate of 9.5 per 100,000 population the rates and numbers gradually fall during the next decade, but rise in the period 1920-1924 to eighteen, with a rate of 6.1 per 100,000 population of the group. During the next decade it reaches a low of five deaths from scarlet fever, with a rate of 1.2 per 100,000 group population.

The age group 1-4 has a higher death rate. Beginning with ninety-seven deaths from scarlet fever, a rate of 17.2, it rises to a high point of 162 deaths, with a corresponding rate of 19.2 per 100,000 group population in the next period. After a fall to a rate of 9.0 in 1915-1919, it again rises to a rate of 14.6 per 100,000 with a high point of 181 deaths. It then receded in the next two periods to a low of 5.3 per 100,000 group population.

The age for school children also shows a death rate somewhat higher than that for children under one year of age, but slightly lower than that for children one to four years of age. We find that at the beginning there are 137 deaths, giving a mortality rate of 10.4 per 100,000 population and this goes to 172, with a rate of 5.5 per 100,000 population in 1920-1925; dropping to 145 with a rate of 3.2 per 100,000 in 1930-1934.

Mortality from Scarlet Fever, 1906-1934

Years	Under 1 yr. Number	Under 1 yr. Rate	1-4 years Number	1-4 years Rate	5-14 years Number	5-14 years Rate
1906-1909	14	9.5	97	17.2	137	10.4
1910-1914	11	5.1	162	19.2	146	7.4
1915-1919	8	2.3	92	9.0	88	3.6
1920-1924	18	6.1	181	14.6	172	5.5
1925-1929	6	1.7	94	6.3	126	3.2
1930-1934	5	1.2	91	5.3	145	3.2

MEASLES

There have been fluctuations in deaths from measles within the different five-year periods, but in general there has been a typical tendency downward. Children under one year of age have the highest death rate from this cause, although those dying between the ages of one to four years contribute the greater number of deaths. The number of children under one year of age dying from measles has varied from 152 with a rate of 103.2 per 100,000 estimated population in that group in 1906-1909, through a peak of 190 deaths with a death rate of 64.0 in 1920-1924 to 122 in 1930-1934 with a corresponding rate of 30.5 deaths from measles per 100,000 children under one.

The number of deaths each period among children one to four years of age is higher than in age group under 1, but the rates are uniformly lower. Beginning with 287 deaths, 1906-1909, and a rate of 50.8, it falls, but rises again in 1920-1924 to 526 deaths with a rate of 42.4. The next five years the rate falls, but rises slightly during the last five years of the study to a rate of 20.8 per 100,000 group population corresponding to 359 deaths.

In the age group 5-14 the number of deaths and the rates fall markedly below those of the earlier age groups. These are the children of school age, and while there is probably a large incidence of cases of the disease, the mortality rate falls markedly. Rates are more nearly uniform for the whole period under observation, varying from 6.6, with 87 deaths during 1906-1909 to 142 deaths with a corresponding rate of 3.1 per 100,000 age group population in 1930-1934.

Mortality from Measles, 1906-1934

Years	Under 1 yr. Number	Under 1 yr. Rate	1-4 years Number	1-4 years Rate	5-14 years Number	5-14 years Rate
1906-1909	152	103.2	287	50.8	87	6.6
1910-1914	170	78.3	406	48.1	87	4.4
1915-1919	114	45.2	242	23.7	85	3.5
1920-1924	190	64.0	526	42.4	156	5.0
1925-1929	104	29.6	257	17.1	83	2.1
1930-1934	122	30.5	359	20.8	142	3.1

WHOOPING-COUGH

This disease at the present time is the most fatal of the communicable diseases among children under one year of age. The case fatality rate is high, and the death rate is higher than for scarlet fever, diphtheria, and tuberculosis among infants. Among the next age group, one to four years, it is still a major cause of death, but is exceeded by tuberculosis and diphtheria. In the age group 5-14, it has taken a very minor place among death-producing communicable diseases.

In 1906-1909, there were 380 deaths of infants under one year, giving the high rate of 258.1 deaths from whooping-cough per 100,000 population of that age.

The next five-year period shows a rise to 618 deaths, with a corresponding rate of 284.6 per 100,000 group population. We notice quite a rise in the number of deaths during the decade 1920-1929, but the mortality rate is somewhat lower than in the preceding five-year period. In the period 1930-1934 the number again falls, with a corresponding decrease in rates. Despite these decreases in death rates, whooping-cough has advanced from second place to first place among communicable diseases as a death-dealing among infants.

In the age group one to four, whooping-cough remains in third place among communicable diseases in all the period study, but falls from a high point of 51.5, with 435 deaths in 1909-1914 to 17.7 and a total of 305 deaths in 1930-1934. The largest number of deaths from this disease is in the period 1925-29, when 510 deaths from whooping-cough occur. The population of the group has increased enough, however, to keep the rate at 34.0 per 100,000 population.

(To be continued)

TWENTY-FIVE YEARS AGO†

EXCERPTS FROM OUR STATE MEDICAL JOURNAL

Vol. IX, No. 5, May, 1911

From Some Editorial Notes:

Squirrel Eradication.—Dr. Rupert Blue, who, for so long a time has been giving most efficient service in squirrel eradication, is fast reaping the benefits of the general campaign which he began last fall toward enforcing the law of March 13, 1909, entitled "An Act for the Extermination of Rodents." The public has been thoroughly informed through the press of the State that this Act would be strictly enforced, and within the past month five Boards of Supervisors in different counties have appropriated money to pay for local inspectors, printing, and the other expenses which will be accrued in putting this law into effect. . . .

* * *

Product Patents.—The old question of whether a manufacturer or discoverer should have the right to patent his chemical, newly invented and of therapeutic value, has received a good deal of discussion during recent years.

* * *

Science in Pharmaceutics.—Probably very few practicing physicians realize that most of the larger manufacturers spend very large sums of money upon what, in many cases, is pure and profitless scientific investigation. . . .

* * *

The Forty-First Annual Meeting.—On account of the fact that some of the reports were received only at the time of the meeting it will not be possible to give a full account of the recent annual meeting of the State Society in this issue of the *Journal.* The minutes, reports, etc., will appear in the June number. The officers elected on Wednesday evening were:

President, Dr. Thomas W. Huntington; first vice-president, Dr. C. S. Stoddard of Santa Barbara; second vice-president, Dr. J. R. Walker of Fresno; secretary, Dr. Philip Mills Jones. . . .

From an article on "Tuberculous Ulceration of the Rectum" by W. H. Kiger, M. D., Los Angeles.

In this great fight against the "white plague," it must not be forgotten that other parts of the human anatomy than the lungs are prone to be attacked and may be destroyed; and, too, when no remedy save the knife can or will effect a cure. . . .

From an article on "A Simple Tonsil Dissector" by Percy Sumner, M. D., San Francisco.

Nothing original is claimed for the instrument presented—it is simply an adaptation from other instruments, making, I believe, an excellent instrument for the removal of the tonsils. . . .

From an article on "Medical Notes Taken in South America" by Douglass W. Montgomery, M. D., San Francisco.

While on our way to South America the captain of the steamer remarked that we would see, south of the equator, a world very much alive, and we did. The medical profession in Buenos Aires partakes of this activity. . . .

Department of Pathology, University of California.

The advent of Frederick P. Gay, formerly connected with the Harvard Medical School, as professor of pa-

† This column strives to mirror the work and aims of colleagues who bore the brunt of Association work some twenty-five years ago. It is hoped that such presentation will be of interest to both old and new members.

(Continued in Front Advertising Section, Page 17)

BOARD OF MEDICAL EXAMINERS OF THE STATE OF CALIFORNIA†

By CHARLES B. PINKHAM, M.D.
Secretary-Treasurer

News

"The Supreme Court today refused to entertain the plea of the United States Naturopathic Association, Ltd., that it issue a writ of mandamus to compel the three-judge federal court to entertain its suit against the California State Board of Chiropractic Examiners and others. The naturopathic group asserted that the Chiropractic Examiners, the California Board of Medical Examiners, the Palmer School of Chiropractic of Los Angeles and others associated with them, sought to deprive the Naturopathic League members of the right to practice their profession." (U. S. Press Dispatch from Washington, D. C., printed in the Santa Monica *Outlook,* March 16, 1936.)

"The tenth Federal Circuit Court of Appeals today upheld the revocation of the medical license of Dr. John R. Brinkley, former Milford, Kansas, specialist. The case has been in the courts for more than four years. Medical Board action barring him occurred nearly six years ago. Doctor Brinkley, who once was defeated as a candidate for governor of Kansas, was accused before the Medical Board of 'fraud, immorality, and unprofessional conduct.' Specifically, it was charged he used animal glands, transplanting them to human beings. The physician filed suit after the Medical Board revoked his license and the case was finally carried to the Circuit Court." (Associated Press Dispatch, dated Denver, April 7, and printed in the San Francisco *Examiner,* April 8, 1934.)

"Major Joseph A. Manning has had many close calls and been in plenty of scrapes during thirty-seven years of government and police work. . . . In 1899, at nineteen, Major Manning left his home town, Bardstown, Kentucky—site of Stephen Foster's 'My Old Kentucky Home'—and sailed from San Francisco with the Army to help quell the Philippine insurrection. The outbreak subdued, Major Manning served in the Manila police till 1917, when he took charge of the District of Columbia unit of the Army's military intelligence detail in the World War. Since 1920 he has been with the Narcotics Bureau in all parts of the United States and its possessions. 'International control of the dope traffic is the only solution,' he declared. 'The work of the League of Nations has already accomplished much. There is far less dope in this country than ten years ago.' Kindly and jovial, Major Manning does not 'go much for probation.' But he believes the way to handle dope addicts is to send them to the brand-new federal health farm-prison at Lexington, Kentucky. . . . He replaced Harry D. Smith, who was moved to Denver, Major Manning's former post." (San Francisco *News,* April 17, 1936.)

"Dr. Samuel A. Twain, registered physician and operator of a clinic at 1799 University Avenue, Berkeley, today pleaded not guilty to two charges of possession of narcotics and one count of conspiracy to violate the State Poison Act, at his arraignment before Superior Judge Lincoln S. Church. His court appearance was the result of the filing of an amended information, containing the three charges. Trial date was set for April 27 by the court. . . . His arrest followed an investigation of the issuance of prescriptions of narcotics by several druggists after they were allegedly signed by Doctor Twain." (Oakland *Tribune,* March 25, 1936.)

"P. Haskell Knowles, chiropractor and herbalist, operating the American Herb Company in the Porter Building here under the name of 'Dr. Haskell,' was arrested

† The office addresses of the California State Board of Medical Examiners are printed in the roster on advertising page 6.

(Continued in Front Advertising Section, Page 18)